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*ALBERTA WOMEN*  
*in*  
*SCIENCE and TECHNOLOGY*

CANADIANA

MAY 25 1994

**Alberta**  
PREMIER'S COUNCIL ON  
SCIENCE AND TECHNOLOGY





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# *Message from the Deputy Premier*

**Honourable Ken Kowalski,  
Deputy Premier,  
Minister of Economic Development and Minister Responsible  
for the Premier's Council on Science and Technology**

The Alberta Government has for many years strongly supported initiatives to increase public awareness of the importance of science and technology. The Premier's Council on Science and Technology has provided advice on this and many other relative matters, and has been very helpful in ensuring that the Government's involvement is most effective.

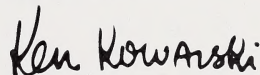
While women have traditionally not participated in science and technology, a strong group of Alberta women have distinguished themselves in a variety of scientific activities.

It is with pleasure that I introduce to you this Directory of Alberta Women in Science and Technology. This project was undertaken by the Premier's Council to identify women who are leaders or emerging leaders in the science and technology community. They are from business, government and academia.

The accomplishments of these women provide an impressive demonstration of the possible achievements of women in science. It is hoped that the Directory will encourage young girls to consider careers in science related fields. As well, businesses and organizations will find the Directory a useful reference when they are looking for suitable appointments to boards and advisory bodies.

I wish to thank the many members of the Premier's Council who volunteered their time and thoughtful consideration, and extend a special note of thanks to Alice Payne, for her tireless and determined leadership of this project. As well, I want to express my appreciation to the corporate sponsors who helped make this project a success.

Yours truly,

A handwritten signature in black ink that reads "Ken Kowalski". The signature is written in a cursive, slightly slanted style.

Ken Kowalski

# ***"ALBERTA WOMEN IN SCIENCE AND TECHNOLOGY"***

## **V O L U N T E E R S**

Dr. Bob Church, Professor Emeritus  
Department of Medical Biochemistry, University of Calgary.

Alice Payne, Senior Geologist  
Gulf Canada Resources Limited, Calgary.

Byron J. Seaman, Calgary.

Dr. Seamus O'Shea, Vice-President/Academic  
University of Lethbridge.

Dr. Mary Spencer, Professor Emeritus  
Department of Plant Science, University of Alberta.

Merle Taylor  
Merle Taylor Management Consulting Ltd., Edmonton.

Sharon Thomas, Science Specialist  
Calgary Board of Education.

Cliff Wright, Pharmacist  
MacKenzie Drug Store, Medicine Hat.



# ***“ALBERTA WOMEN IN SCIENCE AND TECHNOLOGY”***

## **C O R P O R A T E   S P O N S O R S**

Alberta Research Council

Byron J. Seaman.

Canadian Hunter Exploration Ltd.

Chieftain International, Inc.

Gulf Canada Resources Limited.

Imperial Oil Limited.

PanCanadian Petroleum Limited.

Syncrude Canada Ltd.

TransAlta Utilities Corporation.

Vencap Equities Alberta Ltd.

*The Premier's Council on Science and Technology has used its best efforts in collecting and preparing material for inclusion in "Alberta Women in Science and Technology", 1993. It does not assume, and hereby disclaims, errors or omissions in "Alberta Women in Science and Technology", 1993, whether such errors or omissions result from negligence, accident or any other cause.*

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7th Floor, Sterling Place

9940 – 106 Street

Edmonton, Alberta

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Telephone: (403) 427-1488

Fax: (403) 427-0979



# AITKEN, Julie



Calgary,  
Alberta

## ***Current Employment:***

Senior Geophysicist, PanCanadian Petroleum Limited.

## ***Career:***

Geophysicist, PanCanadian Petroleum Limited, 1982-93. Geophysical Technician, Chevron Geosciences Limited, 1980-81.

## ***Education and Professional Designations:***

P.Geoph. Graduate courses in Geophysics and Geology. Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA) Management Certificate, University of Calgary, 1992. B.Sc. (Geophysics Major), University of Calgary, 1982.

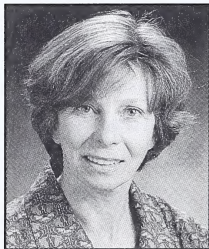
## ***Boards, Councils and Associations:***

Member, Career Counselling Committee, APEGGA, 1993 to present. Member, Enforcement Review Committee, APEGGA, 1989-93.

## ***Contribution to Science:***

Julie Aitken is a career geophysicist who has achieved much in one decade, rising rapidly to a senior level within her firm. One of the first geoscientists to successfully implement three-dimensional technology in geophysical interpretation at PanCanadian Petroleum Limited, she also has been directly responsible for the discovery of several oil and gas pools. She has used her ability to help others by dedicating time and expertise to programs such as "Operation Minerva" job shadowing, "Women in Science" school presentations, and an industry/school partnership program.

# ALLEN, Dr. Theresa M.



Edmonton,  
Alberta

## ***Current Employment:***

Professor, Department of Pharmacology,  
University of Alberta, 1988 to present.

## ***Career:***

Associate Professor, Department of  
Pharmacology, University of Alberta, 1981-88.

Assistant Professor, Department of  
Pharmacology, University of Alberta, 1977-81.

Instructor, Department of Pathology and  
Department of Biochemistry and Associate  
Scientist, Comprehensive Cancer Centre,  
University of Alabama, U.S.A., 1976-77.

Instructor, Department of Pharmacology,  
University of Miami, U.S.A., 1972-76.

## ***Education and Professional***

### ***Designations:***

Ph.D., Oceanography, Dalhousie University,  
Nova Scotia, 1971. B.Sc. (Honours),  
Biochemistry, University of Ottawa, 1965.  
R.T., Medical Technology, Ottawa General  
Hospital, 1961.

## ***Boards, Councils and Associations:***

Secretary, Biophysical Society of Canada,  
1991-94.

## ***Contribution to Science:***

Theresa M. Allen, with a background in  
oceanography, biochemistry and pharma-  
cology, is recognized internationally for her  
research, and has many publications and  
presentations to her credit. Some of her  
recent projects have dealt with the discovery  
of new anticancer metabolites from marine  
organisms; liposomes with prolonged  
circulation times; and the stealth liposome  
targeting project (magic bullets). She has  
recently given invited lectures in the  
United States, Ecuador, Russia and Greece.  
Dr. Allen sits on several advisory boards  
and is Vice-Chair of the Gordin Conference  
on Drug Carriers in Biology and Medicine  
for 1994.



# **ANTONIO, Marlene J.** Calgary, Alberta

## ***Current Employment:***

Retired.

## ***Career:***

Mathematics, science, geology and social studies teacher, 1958-91, Alberta. Committee on Tolerance and Understanding, Alberta, 1983-84. Chair, Alberta Human Rights Commission, 1981-85. Geologist, National Research Council, 1957. Geologist, Texaco Exploration, 1956.

## ***Education and Professional***

### ***Designations:***

M.Ed., University of Calgary, 1972.  
B.A. (Honours) Geology, University of Saskatchewan, 1957. B.Ed., Mathematics, University of Saskatchewan, 1956.

## ***Boards, Councils and***

### ***Associations:***

Chair, Bowmont Natural Park Committee, Calgary. Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA) Council, 1986-91.  
President, Canadian Association of Statutory Human Rights Agencies, 1984-85.

## ***Contribution to Science:***

Marlene J. Antonio throughout her career, has had a profound influence on science education in Alberta. A teacher of natural sciences, she has encouraged students to enter careers in mathematics and science. In collaboration with colleagues, she initiated a series of teacher/student scholarships to promote teaching and study of science and mathematics as well as assisting Rotary International as a role model/speaker. An advocate of human rights, she served a 5 year term as Chair of the Alberta Human Rights Commission. Currently, she is a Member of the Dean's Advisory Committee, Department of Science, Mount Royal College, Calgary.

# ARMOUR, Dr. Margaret-Ann



Edmonton,  
Alberta

## ***Current Employment:***

Assistant Chair, Department of Chemistry,  
University of Alberta, 1989 to present.

## ***Career:***

Faculty Service Officer, Department of  
Chemistry, University of Alberta, 1979-89.  
Research Associate, Department of  
Chemistry, University of Alberta, 1977-79.  
Coordinator and Laboratory Supervisor,  
Sophomore Organic Chemistry Course,  
University of Alberta, 1973-77. Laboratory  
and Tutorial Teacher, Third Year Organic  
Chemistry, University of Edinburgh, U.K.,  
1970-71. Graduate Teaching Assistant, First  
Year General Chemistry, University of  
Alberta, 1966-70. Research Chemist, Alex  
Cowan & Sons Ltd., Papermakers, Scotland,  
1961-66.

## ***Education and Professional***

### ***Designations:***

Postdoctoral Fellow, University of Alberta,  
1971-73. Postdoctoral Fellow, University  
of Edinburgh, 1970-71. Ph.D., University  
of Alberta, 1970. M.Sc., University of Edin-  
burgh, 1966. B.Sc. (Honours), Chemistry,  
University of Edinburgh, 1961.

## ***Boards, Councils and Associations:***

Vice-Chair and Convenor, Women in Scho-  
larship, Engineering, Science and Technology  
(WISEST), University of Alberta, 1984 to  
present. Fellow and Executive Member,  
Chemical Education Division – Chemical  
Institute of Canada.

## ***Contribution to Science:***

Margaret-Ann Armour has published 2 books  
on the disposal of chemicals and has done  
research in the area of recycling and disposal  
of small quantities of waste and surplus  
chemicals. She has developed laboratory  
curricula for undergraduate organic chemis-  
try laboratories. As founding member and  
currently Vice-Chair and Convenor of  
WISEST – Women in Scholarship, Engineer-  
ing, Science and Technology – she has  
furthered the mandate to increase the pro-  
portion of women in decision making roles  
in these fields. She is recognized for her  
leadership role in encouraging women into  
the sciences and engineering. Her efforts  
span more than a decade and she is dedicated  
to reaching all age levels. She presents  
chemistry to school children from kindergar-  
ten to Grade 12 as well as conducting  
seminars, talks and workshops.



# BACOVSKY, Rosemary A.



Calgary,  
Alberta

## ***Current Employment:***

Manager, Policy Development, Non-medical Services, Health Care Insurance Division, Alberta Health, Edmonton, 1993 to present.

## ***Career:***

Project Manager, Research and Planning Branch, Policy and Planning Services Division, Alberta Health, Edmonton, 1990-92. Director of Pharmacy, Redwater General Hospital, 1988-90. Clinical Instructor and Lecturer, Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, 1982-92. Staff Pharmacist, Assistant Director and Acting Director of Pharmacy, Cross Cancer Institute, Edmonton, 1978-88.

## ***Education and Professional***

### ***Designations:***

Master of Health Services Administration, University of Alberta coursework completed. Master of Pharmacy, University of Alberta, 1985. Hospital Pharmacy Residency Certificate, Royal Alexandra Hospital, Edmonton, 1978. Registered with the Alberta Pharmaceutical Association, 1977. Bachelor of Science in Pharmacy, University of Alberta, 1977. Bachelor of Science, University of Alberta, 1974.

## ***Boards, Councils and Associations:***

Fellow and Chair, Board of Fellows, Canadian Society of Hospital Pharmacists, 1992-94. Fellow, American Society of Hospital Pharmacists. Secretary, Canadian Foundation for Pharmacy. Pharmacy Examining Board of Canada. President, Canadian Society for International Health, 1985-86.

## ***Contribution to Science:***

Rosemary A. Bacovsky is well known for her advancement of Canadian pharmacy. Some of her numerous accomplishments are development of programs in chemotherapy, involvement of oncology pharmacy programs, and solutions to the handling and disposal of hazardous pharmaceuticals. For the latter she has become known as the "pharmacy garbage expert." Her extensive knowledge in a complex field has positive reverberations for society. Many publications and lectures on topics such as chemotherapy admixtures, oncology pharmacy practice and pain control, illustrate the practical applications of her science. She is an international lecturer and actively participates in provincial, national and international health care and pharmacy organizations.

# *BIENIA, Alice E.*



Calgary,  
Alberta

## ***Current Employment:***

Information Management Advisor, Finance, Law and Corporate Services, Gulf Canada Resources Limited, 1993 to present.

## ***Career:***

Senior Advisor, Control Assessment Audit, 1991-93; Coordinator – Southern Alberta (Development), 1989-91; Coordinator – East Coast Arctic Islands, 1986-89; Coordinator – Arctic Islands/N.W.T., 1984-86; Business Administration Division, Exploration Department, 1983-84; Project Supervisor, Coal Exploration, 1979-83, Gulf Canada Resources Limited. Geologist, Pacific Petroleum/Petro-Canada Exploration Inc., 1977-79. Geologist, Denison Mines Ltd., 1976-77. Geologist, Shell Canada Resources Ltd., 1976. Churchill River Study Project, 1975-76.

## ***Education and Professional***

### ***Designations:***

P. Geol. B.Sc., Geology, University of Calgary, 1976.

## ***Contribution to Science:***

Alice E. Bienia, as a professional geologist at the managerial level, is an exceptional role model for women in science and engineering. She demonstrates a strong commitment to her profession and transfers that commitment to young women by leading the way in organizing Career Days as part of an industry wide program. Dedication to the community is apparent in her volunteering, her public speaking and in the recruitment and training of students.



# *BIRSS, Dr. Viola I.*



Calgary,  
Alberta

## ***Current Employment:***

Professor, Department of Chemistry,  
University of Calgary, 1991 to present.

## ***Career:***

Associate Professor, Department of  
Chemistry, University of Calgary, 1986-91.  
Assistant Professor, Department of  
Chemistry, University of Calgary, 1983-86.  
Research Chemist, Alcan International Ltd.,  
Kingston Research Laboratories, 1981-82.  
Senior Scientist, Continental Group Inc.,  
University of Ottawa, 1979-81.

## ***Education and Professional***

### ***Designations:***

Postdoctoral Fellowship, University of  
Ottawa, 1979. Ph.D., Electrochemistry,  
University of Auckland, New Zealand, 1978.  
Teaching Fellowship, University of Auckland,  
1976. B.Sc. (Honours), Chemistry, University  
of Calgary, 1972.

## ***Boards, Councils and Associations:***

Executive Committee of 2 Divisions, Canadian  
Society for Chemistry. Past Chair of Canadian  
Section, Electrochemical Society Inc. Past  
Chair, Chemistry Grant Selection Committee,  
Natural Sciences and Engineering Research  
Council.

## ***Contribution to Science:***

Viola I. Birss is rapidly gaining international  
recognition in the field of electrochemistry.  
She is a chemistry professor who has super-  
vised research of more than 35 students,  
visiting scientists, postdoctoral fellows  
and technicians, and is the author of many  
scientific publications and presentations.  
She organizes symposia on electrochemistry  
and 'women in science' and is active in the  
Women in Science and Engineering group,  
University of Calgary. She is also an active  
participant in junior and senior high school  
Career Nights, science fairs and takes part  
in the CBC Radio Science Hotline.

# *BRYANT, Dr. Heather E.*



Calgary,  
Alberta

## ***Current Employment:***

Clinical Associate Professor, Department of Community Health Sciences, University of Calgary, 1992 to present. Director of Screen Test, Alberta Program for the Early Detection of Breast Cancer, Alberta Cancer Board, 1990 to present. Consulting Medical Staff, Tom Baker Cancer Centre, 1990 to present.

## ***Career:***

Assistant Professor, University of Calgary, 1987-90. Physician, International Travel and Immunization Clinic, University of Calgary, 1986-90. Medical Officer of Health, Drumheller Health Unit, 1986-90. Lecturer, Department of Community Health Sciences, University of Calgary, 1986-87.

## ***Education and Professional Designations:***

Post Graduate work, Universities of Minneapolis and Michigan, U.S.A., 1989. F.R.C.P., Community Medicine, Royal College of Physicians and Surgeons of Canada, 1986. Ph.D. (Epidemiology) Community Health Sciences, University of Calgary, 1986. C.C.F.P., Family Medicine Residency Training Program, Foothills Hospital, Calgary, 1981. M.D., Uni-

versity of Calgary, 1979. B.Sc. (Honours), Plant Biology, University of Calgary, 1976.

## ***Boards, Councils and Associations:***

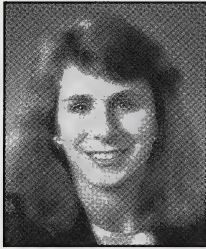
M.D., University of Calgary, 1979. B.Sc. (Honours), Plant Biology, University of Calgary, 1976. Chair, Scientific Program Committee, Royal College of Physicians and Surgeons, 1991 and 1987-89. Executive, Canadian Association of Teachers of Social and Preventive Medicine – President, 1989-91; Vice President, 1987-89.

## ***Contribution to Science:***

Heather E. Bryant is researching baseline information, and a research frame for the Alberta Program for the Early Detection of Breast Cancer and is responsible for the initiation and development of the first province-wide screening program in Alberta for this disease. Ongoing projects include screening mammography, family history (breast cancer risks), and breast cancer etiology. She has consulted on a wide range of projects relating to women's health and occupational health, as well as chronic and infectious diseases. She is a member of several associations concerned with biology and epidemiology. Publications and presentations cover a wide body of work in her disciplines.



# CANNON, Dr. M. Elizabeth



Calgary,  
Alberta

## ***Current Employment:***

Associate Professor, Department of Geomatics Engineering, University of Calgary, 1991 to present.

## ***Career:***

Graduate Researcher, Department of Surveying Engineering, University of Calgary, 1985-91. Development Engineer, Advanced Technologies Division, Nortech Surveys (Canada) Inc., Calgary, 1984-85.

## ***Education and Professional Designations:***

Ph.D. (Surveying Engineering) University of Calgary, 1991. M.Sc., (Surveying Engineering) University of Calgary, 1987. B.Sc., (Surveying Engineering) University of Calgary, 1984. B.Sc., (Mathematics and Computer Science), Acadia University, 1982. Certificate of Engineering, Acadia University, 1982.

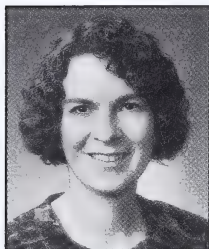
## ***Boards, Councils and Associations:***

Chair, International Association of Surveyors Working Group on Kinematics Survey Methods, 1992-95. Vice President, U.S. Institute of Navigation, 1993-94. U.S. Institute of Navigation Councillor (Western Region Member-at-Large), 1992-93.

## ***Contribution to Science:***

M. Elizabeth Cannon is a talented engineer who has already made significant technical contributions to her specialist areas of surveying, mapping and navigation. She has published over 50 scientific articles and has received several national and international awards, including the Natural Sciences and Engineering Research Council (NSERC) Women's Faculty Award. She has also organized several international scientific conferences. As a teacher and scholar she has presented courses worldwide to professionals on satellite positioning and navigation. Her teaching extends to the community as she has been a mentor for "Operation Minerva," a speaker at many junior and senior high schools and a group leader for Women in Science.

# CAREY, Paula



Calgary,  
Alberta

## ***Current Employment:***

President, Joules: Natural Gas Marketing Consulting Service, 1989 to present. Joint Venture, Software Development – Gas Marketing Applications, 1993 to present.

## ***Career:***

Oil and Gas Policy Advisor, Government of British Columbia, 1991. Senior Analyst, North Canadian Marketing, 1987-89. Marketing Analyst, Gulf Canada Resources Limited, 1978-87.

## ***Education and Professional Designations:***

B.Sc. (Honours), University of Toronto, 1978.

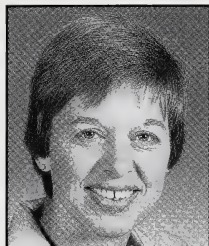
## ***Boards, Councils and Associations:***

Founding Director, Alberta Science Centre Society. Past Chair, YWCA's "Lifeprints Program".

## ***Contribution to Science:***

Paula Carey is recognized by government and industry as an expert in her specialties of gas marketing and gas marketing software applications. Her interaction with the community at large is extensive and she encourages young people in their science and mathematics pursuits by her volunteer efforts. She recently began a networking organization, Girls in Gas (GIGAS), for women pursuing oil and gas marketing careers in Calgary (over 160 members in the first 6 months of 1993). A founding director of the Alberta Science Centre Society, she also served for years as judge for the Calgary Youth Science Fair. She is the author of "Balancing: Career, Family and Self" – a program for women.

# CASS, Dr. Carol E.



Edmonton,  
Alberta

## ***Current Employment:***

Professor, Department of Biochemistry,  
University of Alberta, 1987 to present.

Professor, Department of Oncology, University of Alberta, 1993 to present. Terry Fox Cancer Research Scientist, National Cancer Institute of Canada, 1993 to present. Senior Research Scientist, National Cancer Institute of Canada, 1982 to present. Research Associate, Department of Medicine, Cross Cancer Institute, 1978 to present.

## ***Career:***

Associate Professor, Department of Biochemistry, University of Alberta, 1980-87. Assistant Professor, Department of Biochemistry, University of Alberta, 1974-80. Member, NCIC Cancer Research Group, McEachern Laboratory, University of Alberta, 1973-89. Postdoctoral Fellow, McEachern Laboratory, University of Alberta, 1970-73.

## ***Education and Professional***

### ***Designations:***

Ph.D., Zoology (Cell & Developmental Biology), University of California, Berkeley, U.S.A., 1971. M.Sc., Zoology (Cell Physiology), University of Oklahoma, 1965. B.Sc. With

Special Distinction, Zoology, University of Oklahoma, 1963.

## ***Boards, Councils and Associations:***

President, Canadian Society for Cellular and Molecular Biology, 1992-94. Director, Canadian Federation of Biological Societies, 1992-94.

## ***Contribution to Science:***

Carol E. Cass is currently researching the cellular pharmacology of nucleoside drugs, including drug resistance, and mechanisms of membrane transport of nucleosides and nucleoside drugs – important topics in anti-cancer and antiviral therapy. As a specialist in cancer pharmacology, she contributes expertise to Cross Cancer Institute Committees and the Alberta Cancer Board. She is active in the National Cancer Institute of Canada, and currently serves as a member of the Institute's Advisory Committee on Research. She has also served on many committees of the Canadian Cancer Society, including the Board of Directors of the Alberta/NW Territories Division, and is currently Scientific Advisor to the Edmonton Unit Board and a member of that Board's Council. Participant in many University and professional groups, she has, as well, a long list of publications to her credit, and has been a promoter for public awareness of science. Author and presenter of three separate series for television on cancer topics, she has given many media conferences, television and radio interviews.



# CHERITON, E. Muriel



Edmonton,  
Alberta

## ***Current Employment:***

Secretary Treasurer, Optum Group Consultants Limited, 1981 to present.

## ***Career:***

Partner, W.R. Cheriton & Associates Ltd., 1963-79. Canadian General Electric Co. Ltd., 1947. Calgary Power Ltd., 1946.

## ***Education and Professional***

### ***Designations:***

P.Eng. B.Sc. in Electrical Engineering, University of Alberta, 1946.

## ***Boards, Councils and***

### ***Associations:***

Chair, Discipline Committee, Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA).  
Board Member, Alberta College. Research Chair, Consumers Association of Canada (Alberta Branch).

## ***Contribution to Science:***

E. Muriel Cheriton has played a pioneering role in the integration of women into science and non-traditional jobs. Only the second woman to graduate from the University of Alberta in engineering, she has encouraged women in this career and contributed her expertise to society at large. She has been research chair for the Consumers Association of Canada, has been involved with the Alberta Cancer Society, the Alberta Heart and Stroke Foundation and is a founding member of Women in Scholarship, Engineering, Science and Technology.

# *CODDING, Dr. Penelope W.*



Calgary,  
Alberta

## ***Current Employment:***

Professor, 1989 to present, and Head, 1993 to present, Department of Chemistry, University of Calgary.

## ***Career:***

Faculty Member (Heritage Medical Scholar), Department of Chemistry, University of Calgary, 1981 to present. Research Associate, University of Calgary, 1976-81. Assistant Professor, Department of Chemistry, Branch Faculty, Kent State University, U.S.A., 1974-76.

## ***Education and Professional***

### ***Designations:***

Postdoctoral Fellowship, University of Alberta, 1971-74. Ph.D. in Physical Chemistry, Michigan State University, U.S.A., 1971. NDEA Title IV Fellow. B.S. with High Honour, Michigan State University, 1968. National Merit Scholar.

## ***Boards, Councils and Associations:***

Executive Committee, International Union of Crystallography, 1990-96. Former Chair and Secretary Treasurer, Small Molecule Special Interest Group, American Crystallographic Association.

## ***Contribution to Science:***

Penelope W. Coddington is a physical chemist who has authored over 60 scientific publications and made 65 presentations at scientific conferences. She has organized numerous symposia on crystallography and regularly served as grant and journal reviewer in her area of expertise. As professor and department head she is research supervisor over students, visiting scientists, postdoctoral fellows and technicians, and also finds time to sit on panels which review high school science curricula.

# *COLLINS-NAKAI, Dr. Ruth L.*



Edmonton,  
Alberta

## ***Current Employment:***

Professor, Department of Pediatrics and Associate Dean, Faculty of Medicine, University of Alberta, 1988 to present. Active Staff, (Pediatric Cardiology), University of Alberta Hospitals. Consulting Staff for several other hospitals.

## ***Career:***

Director, Pediatric Cardiology Training Program, Edmonton, 1990-93. Associate Professor, Department of Pediatrics, University of Alberta, 1980-88. Director, Alberta Heritage Pediatric Cardiology Program, 1982-84 and 1979-80. Coordinator of Phase III (Undergraduate) Teaching in Pediatrics, 1977-80 and Assistant Professor, Department of Pediatrics, University of Alberta, 1977-80. Clinical Teaching Fellow in Pediatrics and Fellowship in Pediatric Cardiology, Children's Hospital Medical Centre, Harvard University, U.S.A., 1974-76. Resident in Pediatrics, University of Alberta, 1973-74. Internship, Montreal General Hospital, Montreal Children's Hospital, McGill University, Quebec, 1972-73.

## ***Education and Professional Designations:***

Fellowship, American College of Cardiology [FACC], 1978. Fellowship, American Academy

of Pediatrics [FAAP], 1978. American Boards in Pediatrics, 1977. FRCP(C), Pediatric Cardiology, 1977. FRCP(C), Pediatrics, 1976. M.D., University of Alberta, 1972. Licentiate, Medical Council of Canada, 1972. Premedicine, University of Alberta, 1966-68.

## ***Boards, Councils and Associations:***

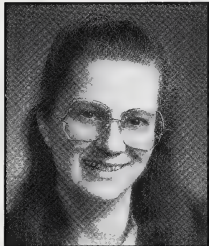
Member, Premier's Council on Science and Technology, Alberta. Member of the Board, Heart and Stroke Foundation of Alberta. Director, Muttart Foundation. Chair, Ethics Committee, 1993, and Council Member, 1992-95, Canadian Cardiovascular Society. Chair, Board of Governors, American College of Cardiology (ACC), 1992-93. Executive, ACC, 1991-94. Governor, Prairie Provinces, ACC, 1987-91. Chair, Committee to Review Physician Resources Data Bank, 1991-92, and Board of Directors, 1988-90, Canadian Medical Association. Commissioner, Premier's Commission on Future Health Care for Albertans, 1987-90. President, Alberta Medical Association, 1986-87.

## ***Contribution to Science:***

As a specialist in pediatric cardiology and cardiac epidemiology, Ruth L. Collins-Nakai is well known for her work in pharmacokinetics and vasodilators in congestive heart failure in infants and children, and for her work on the epidemiology of congenital heart disease in Alberta. She is also the author of many articles and publications. She has served as an officer on the executive of many professional associations and foundations.



# COMPEREN, Betty M.



Calgary,  
Alberta

## ***Current Employment:***

Consultant. Hydraulics Technologist, Foothills Pipe Lines Ltd., 1987 to present.

## ***Career:***

Temporary Assignment in Argentina, Novacorp International, 1993. Technologist, Heavy Oil Division – Pipeline, Husky Oil Operations Ltd., 1982-86. Business Manager, The Artisan Stained Glass Studio, 1978-81. Technical Analyst, Nova Corporation of Alberta, 1975-78.

## ***Education and Professional***

### ***Designations:***

Registered Engineering Technologist (R.E.T.), Alberta Society of Engineering Technologists (ASET), 1978. C.G.A., Certified General Accountants' Association of Alberta Program, 1987. Honours Diploma, Engineering Science Technology Program, Southern Alberta Institute of Technology (SAIT), 1975.

## ***Boards, Councils and***

### ***Associations:***

Chair, Maintenance of Standards Committee for Certified General Accountants' Association of Alberta, 1991-93. SAIT Communications Arts Advisory Committee, 1991-93. Executive Member, Calgary Chapter, ASET, 1991-93. Co-Chair, Calgary Chapter, ASET, 1990-91.

## ***Contribution to Science:***

Betty M. Comperen, while on a temporary assignment in Argentina, was responsible for analysis of a 4,500 km pipeline system to determine problem areas and bottlenecks and to suggest possible remedial actions. Several areas for improvement were identified and suggestions were made to update the hydraulic model of the system. She assisted in the design of the Alaska Highway Pipeline, during the National Energy Board Hearings in the late 1970's. She was also involved in the "update application" of the Alaska Highway Pipeline in the late 1980's. In addition, she worked on expansion applications of Phase I of the Alaska project which was pre-built and has been operational since 1981. In all positions she has had, Betty has been involved with the training of personnel in company procedures and the use of computer applications. She has served on the City of Calgary Transit Task Force and received commendations for her contributions to the report and recommendations on the transit needs of three adjoining communities.

# COOL, Rejeanne B.



Fort Saskatchewan,  
Alberta

## ***Current Employment:***

Research Leader/Laboratory Supervisor,  
Dow Chemical Canada Inc., Fort Saskatchewan,  
1991 to present.

## ***Career:***

Project Leader/Laboratory Supervisor, 1989-91;  
Project Leader, 1986-89; Research Engineer,  
1980-86, Dow Chemical Canada Inc.

## ***Education and Professional***

### ***Designations:***

B.Sc. (Honours), Engineering Chemistry,  
Queen's University, 1980.

## ***Contribution to Science:***

Rejeanne B. Cool is presently conducting research which involves new product formulations and process improvements for a world scale chemical plant. She directs the activities of a group of chemists, engineers and technologists in product and process research and quality control laboratories. She was responsible for the development of computer models for power plant energy optimization and of on-line process analyzers. She has also been active in Site Community Awareness activities such as Partners in Education and the Young Scientist Conference.

# COOLEY, Dr. Jean M.



Edmonton,  
Alberta

Alberta Institutes of Technology. Past Treasurer, Association of Women in Engineering and Science, (AWES) Edmonton.

## ***Contribution to Science:***

Jean M. Cooley has pursued a career in analytical chemistry which has included scientific and administrative positions. She is currently developing analytical methods which will be used to characterize the synthetic crude oil which is produced by Syncrude Canada Ltd. As an exchange scientist she has worked on pilot programs for optimizing processes for heavy oil upgrading. She has supervised scientific and laboratory service groups with 6 to 20 people. Her commitment to science is also carried out in speaking sessions for high school students, chairing advisory committees for technical schools and recently as treasurer for the Association of Women in Engineering and Science.

## ***Current Employment:***

Research Associate, Analytical Services, Syncrude Research Centre, 1992 to present.

## ***Career:***

Exchange Scientist, Edmonton Refinery, 1992; Exchange Scientist, Research and Development, Sheridan Park, Ontario, 1990-91, Petro-Canada. Section Head, Upgrading Research, 1988-90; Section Head, Fundamental Studies, 1986-88; Section Head, Laboratory Services, 1984-86, Syncrude Research Centre.

## ***Education and Professional***

### ***Designations:***

Ph.D., Analytical Chemistry, University of Alberta, 1977. B.Sc. (First Class Honours), Chemistry, Dalhousie University, Nova Scotia, 1971.

## ***Boards, Councils and***

### ***Associations:***

Director, Association of the Chemical Profession of Alberta (ACPA). Councillor, national executive, Chemical Institute of Canada. Past Chair, Chemical Technology Advisory Committee, Northern/Southern



# COWAN, Patricia



Calgary,  
Alberta

## ***Current Employment:***

Senior Geologist – Foothills, PanCanadian Petroleum Limited, 1991 to present.

## ***Career:***

Senior Staff Geologist – North East British Columbia, Unocal Canada, 1987-91.

Geologist, Murphy Oil Limited, Calgary, 1984-86. Geologist, Amoco Canada Petroleum Company Ltd., Calgary, 1980-84.

## ***Education and Professional***

### ***Designations:***

P.Geol. M.Sc., Geology, McMaster University, Ontario, 1979. Honours B.Sc., Cooperative Earth Sciences, University of Waterloo, Ontario, 1977.

### ***Contribution to Science:***

Patricia M. Cowan is a geologist who has discovered oil and gas pools in Western Canada, most recently 3 pools in the northeastern part of British Columbia. She was responsible for integration of the complete program from the early exploration phases of regional geology and geophysics to

the development phases of drilling and facilities and pipeline timing. As Senior geologist she has co-organized a technical course on carbonate stratigraphy, has composed and edited a manual for use by employees in sample examination, and has interviewed companies to help set standards for technical excellence in the exploration department. She is active in several professional organizations, including the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA), Canadian Society of Petroleum Geologists (CSPG) and American Association of Petroleum Geologists (AAPG). She received the Bickell Scholarship from the University of Waterloo for top marks in Earth Science.

# *CROWN, Dr. Elizabeth M.*



Edmonton,  
Alberta

## ***Current Employment:***

Chair, Department of Human Ecology, University of Alberta, 1993 to present. Professor of Clothing and Textiles, University of Alberta, 1983 to present.

## ***Career:***

Dean, Faculty of Home Economics, University of Alberta, 1991-93. Chair, Department of Clothing and Textiles, University of Alberta, 1980-88. Associate Dean, Faculty of Home Economics, University of Alberta, 1977-79. Assistant/Associate Professor, University of Alberta, 1970-83. Lecturer, University of Alberta, 1969-70. Instructor, Ryerson Polytechnical Institute, 1967-69.

## ***Education and Professional***

### ***Designations:***

Professional Home Economist (PHEC). Associate of The Textile Institute (ATI). Ph.D., Educational Administration, University of Alberta, 1978. M.Sc., Textile Science, University of Guelph, 1967. B.HSc., University of Guelph, 1966.

## ***Boards, Councils and Associations:***

Chair, Professional Examinations Board in Home Economics, Universities Coordinating Council, 1989 to present. Board of Directors, Institute of Textile Science, 1987-91. Board Member, Social Sciences Federation of Canada, 1985-87. President, Canadian Association for Research in Home Economics, 1983-85. Chair, Resolutions Committee, Canadian Home Economics Association, 1978-81. President, Alberta Home Economics Association, 1976-77.

## ***Contribution to Science:***

Elizabeth M. Crown is known for her work on thermal protective clothing and protective clothing for agricultural workers. She has published on such topics as textile flammability, worker attitudes toward protective clothing, and limiting pesticide exposure through clothing. Much of her research relates to the evaluation of clothing systems for protection against flash fires, for example, for workers in the oil and gas industries. Her many activities in professional organizations include being Editor, Research Section of the Canadian Home Economics Journal. She contributes to the community through her work on several standards organizations, including The Standards Council of Canada and the Canadian General Standards Board.

# DAVIES, Linda M.



Calgary,  
Alberta

## ***Current Employment:***

Technical Manager, Southern Operations Division, Imperial Oil Limited, 1993 to present.

## ***Career:***

Manager, Geoscience, Research and Technology, 1991-93; Manager, Geoscience Computing, 1991; Supervisor, Exploration (Western Canada & Beaufort) and Geophysicist, 1978-91, Imperial Oil Limited. Geophysicist, Shell Canada Limited, 1973-78.

## ***Education and Professional***

### ***Designations:***

P.Geoph. M.Sc., Geophysics, University of Alberta, 1973. B.Sc., Mathematics and Physics, University of Toronto, 1971.

## ***Contribution to Science:***

Linda M. Davies is recognized as an expert in the field of geophysics. In addition to her specialty of seismic processing, she has broadened her knowledge to include all aspects of oil and gas exploration and exploitation. Member of her company's Technical Excellence Team, she is also Chair of the Imperial Geoscience Job Family Committee. She has focused most recently on sponsoring diversity within Imperial by managing a cross gender mentoring pilot, individual mentoring of others, and championing alternate work arrangements.



# DI CAPUA, Maria



Calgary,  
Alberta

## ***Current Employment:***

Staff Engineer – Joint Interests Department,  
PanCanadian Petroleum Limited, 1991 to  
present.

## ***Career:***

District Engineer, Reservoir Engineering  
Department, 1985-91; Senior Engineer,  
Enhanced Oil Recovery Department, 1982-85;  
Senior Engineer, Reservoir Engineering,  
1977-82, PanCanadian Petroleum Limited.

## ***Education and Professional***

### ***Designations:***

P.Eng. M.Sc., Chemical Engineering,  
University of Calgary, 1978. B.A., Chemical  
Engineering, Universidad Tecnica del Estado  
– Santiago, Chile, 1973.

## ***Boards, Councils and***

### ***Associations:***

Founder and Treasurer, Association of Latin  
American Women.

## ***Contribution to Science:***

Maria Di Capua was the first woman to  
receive an engineering degree from the Uni-  
versidad Tecnica del Estado in Santiago, Chile.  
Her professional accomplishments as a  
chemical engineer include the formulation  
and implementation of long-term develop-  
ment strategies for several mature oil  
reservoirs, and she is credited with the  
design and implementation of the first  
Caustic-Polymer Pilot Project in Alberta.  
She is now in the Joint Interests Department  
and has participated in the Environmental  
Task Force sponsored by the Petroleum Joint  
Venture Association (PJVA).

# DIXON, Dr. Elisabeth A.



Calgary,  
Alberta

## ***Current Employment:***

Senior Instructor, Department of Chemistry,  
University of Calgary, 1982 to present.

## ***Career:***

Instructor II, University of Calgary, 1978-82.  
Sessional Instructor, University of Calgary,  
1976-78. Postdoctoral Fellowship, University  
of Victoria, 1976. Postdoctoral Fellowship,  
University of Victoria, 1974.

## ***Education and Professional***

### ***Designations:***

Ph.D., Physical Organic Chemistry,  
University of Victoria, 1974. Graduate, Royal  
Institute of Chemistry, 1970. B.Sc.  
(Honours), Trent Polytechnic, University  
of London, 1969.

## ***Boards, Councils and***

### ***Associations:***

Fellow, Canadian Institute of Canada, 1993.  
Director, SEEDS Foundation, 1992. Director,  
Alberta Science Centre Society, 1986-90.  
Chair, Chemical Education Division, Canadian  
Society for Chemistry, 1987.

## ***Contribution to Science:***

Elisabeth A. Dixon is author of over 90  
chemical education publications and 2  
patents, and is active in research related to  
chemical education as well as chemical  
ecology. She serves on numerous  
committees including those dealing with  
instructional methodology and women in  
science. Aspiring scientists also benefit from  
her expertise in science enrichment projects,  
"Operation Minerva" and in public lectures  
on chemistry.

# *DOW BAKER, Camille A.*



Calgary,  
Alberta

## ***Contribution to Science***

Camille A. Dow Baker is a mining engineer and senior manager. She graduated with great distinction from McGill University and has carried that high level of achievement into her career in reservoir and production engineering and exploitation geology and geophysics. She is actively involved in an industry education program.

## ***Current Employment:***

Manager, Exploitation, Norcen Energy Resources Limited, 1992-present.

## ***Career:***

Manager, Reservoir Engineering and Development Geology, 1989-92; Chief Production Engineer, South and East Districts, 1986-89; Chief Reservoir Engineer, 1984-86, Norcen Energy Resources Limited.

## ***Education and Professional***

### ***Designations:***

P.Eng. B.Sc., Mining Engineering with Great Distinction, McGill University.

## ***Boards, Councils and***

### ***Associations:***

Director, Alberta Oil Sands Technology and Research Authority (AOSTRA).



# *DOWNEY, Anne W.*



Calgary,  
Alberta

## ***Current Employment:***

Manager, Budgets and Planning, Gulf Canada Resources Limited, 1991 to present.

## ***Career:***

Team Member, Transformation Effort, 1991;  
Coordinator, Reservoir Engineering, 1989-90;  
Supervisor, Hanlan Plant/Area, 1988-89;  
Senior Engineer, Joint Interest Operations,  
1986-88; Field Engineering Supervisor,  
Production Operations, 1982-86; Production  
Engineer, 1980-82; Reservoir Engineer,  
1977-80, Gulf Canada Resources Limited.

## ***Education and Professional***

### ***Designations:***

P.Eng. Bachelor of Mechanical Engineering,  
Memorial University of Newfoundland, 1977.

## ***Boards, Councils and***

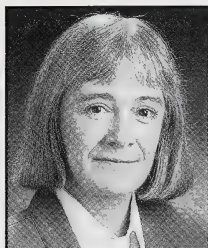
### ***Associations:***

Director, Edmonton Branch of the Petroleum  
Society, Canadian Institute of Mining,  
Metallurgy and Petroleum (CIM). Director,  
national body of the Petroleum Society,  
CIM, 1986-89.

## ***Contribution to Science:***

Anne W. Downey, a mechanical engineer and senior manager at Gulf Canada Resources Limited, has done a spectrum of scientific and managerial work including reservoir, production and field engineering as well as plant supervision and corporate budgeting and planning. Active in the encouragement and advancement of women in science, she has organized all day seminars in the industry and has been involved with the "Minerva Program" for junior high school girls.

# DUNN, Dr. Susan



Edmonton,  
Alberta

## ***Current Employment:***

Professor, Department of Pharmacology,  
University of Alberta, 1993 to present.

Professor, Division of Neuroscience,  
University of Alberta, 1993 to present.

## ***Career:***

Associate Professor, Division of Neuroscience,  
University of Alberta, 1991-93. Associate

Professor, Department of Pharmacology,  
University of Alberta, 1988-93. Adjunct

Associate Professor, Department of Physical  
Therapy, University of Alberta, 1989-91.

Assistant Professor, Department of Physio-  
logy and Biophysics and Assistant Professor,  
Division of Neuroscience, College of Medi-  
cine, University of Iowa, U.S.A., 1985-88.

Research Associate, Division of Chemistry  
and Chemical Engineering, California

Institute of Technology, California, U.S.A.,  
1983-85. M.R.C. Postdoctoral Fellow,

Department of Biochemistry, Imperial Colle-  
ge of Science and Technology, London, U.K.,

1982-83. Research Fellow, Division of  
Chemistry and Chemical Engineering,

California Institute of Technology, 1978-81.

## ***Education and Professional***

### ***Designations:***

Ph.D., Molecular Pharmacology, National  
Institute for Medical Research, London,  
U.K., 1978. B.Sc., (First Class Honours),  
Biochemistry, University of Strathclyde,  
Scotland, 1975.

### ***Contribution to Science:***

Susan Dunn is a molecular pharmacologist  
who is active in the research community,  
having developed a new method to study  
the brain chemical GABA, an approach rele-  
vant to the search for improved drugs for  
the treatment of disorders such as epilepsy,  
alcoholism and anxiety. Her accomplish-  
ments in science include a large number  
of publications and presentations as well  
as teaching roles with undergraduate  
and graduate students. She is a member  
of numerous international societies and  
is involved in peer review of grant applica-  
tions and scientific publications.

# EATON, Susan R.



Calgary,  
Alberta

## ***Current Employment:***

Petroleum Geophysicist, Suncor Inc.,  
Resources Group, 1990 to present.

## ***Career:***

Senior Geophysicist, Teknica Petroleum  
Services Ltd., 1988-90. Journalist, CBC-TV,  
St. John's, Newfoundland, 1987. Evaluation  
Geophysicist, Canada Oil and Gas Lands  
Administration (COGLA), Ontario, 1983-85.  
Geophysicist/Geologist, Esso Resources  
Canada Ltd., 1980-83.

## ***Education and Professional***

### ***Designations:***

P.Geol. M.Sc., Petroleum Geology  
(Geophysics Option), University of London,  
1988; Diploma of Imperial College (DIC). B.J.  
Honours (Journalism), Carleton University,  
1987. B.Sc., Geology and Biology (Honours),  
Dalhousie University, 1980.

## ***Boards, Councils and***

### ***Associations:***

Director, Calgary Rainforest Action  
Group (CRAG).

## ***Contribution to Science:***

Susan R. Eaton is a petroleum geophysicist  
who employs state-of-the-art science and  
technology to explore for oil and gas.  
She analyzes 2-D and 3-D reflection seismic,  
well borehole seismic, magnetic and gravity  
data, in order to locate significant accumula-  
tions of hydrocarbons in the subsurface.  
Susan combined her expertise in the field  
of science and technology with a degree  
in journalism, enabling her to work as a TV  
journalist specializing in issues ranging from  
the environment to mining and petroleum.  
As a director of the Calgary Rainforest Action  
Group, a nongovernmental organization,  
Susan helps educate the general public on  
the issues surrounding rainforest destruction.  
She has established a computer education  
project in Calgary's elementary schools on  
Canada's temperate rainforests, as well as  
an essay competition in Calgary high schools.



# *ELIO, Dr. Renee*



Edmonton,  
Alberta

## ***Current Employment:***

Associate Professor, Department of Computing Science, University of Alberta, 1990 to present. Director of Undergraduate Programs, Department of Computing Science, University of Alberta, 1991 to present.

## ***Career:***

Visiting Scholar, Department of Epidemiology, University of Washington, U.S.A., 1990-91. Consultant, AGT Limited, Edmonton, 1989-90. Assistant Professor, Department of Computing Science, University of Alberta, 1985-90. Consultant, Synerlogic, Inc., Calgary, 1986. Consultant, Interact Research & Development, Victoria, B.C., 1985. Research Scientist, Alberta Research Council, 1983-85. Member, Information and Decision Sciences Group, Bell Laboratories, New Jersey, U.S.A., 1981-83.

## ***Education and Professional***

### ***Designations:***

Ph.D., Cognitive Psychology, Carnegie-Mellon University, U.S.A., 1981. M.S., Cognitive Psychology, Carnegie-Mellon University, 1979. B.A. (Honours), Smith College, U.S.A., 1977.

## ***Boards, Councils and Associations:***

Board of Directors, Edmonton Council for Advanced Technology, 1992 to present.

Board of Directors, Alberta Research Council, 1988-93.

## ***Contribution to Science:***

Renee Elio's research interests are in the areas of human cognition, artificial intelligence, expert systems, human information processes and machine learning. She has advanced the knowledge in these fields, and has numerous scientific publications to her credit. Her work has included research in computer models of intelligence and applied research in knowledge based systems. She teaches about expert systems and artificial intelligence. Dr. Elio is a member of the Board of Directors for advanced technology concerns such as the Alberta Research Council and the Edmonton Council for Advanced Technology. She is a consultant for Alberta companies dealing in advanced computer technology.

# *ENGLISH, Dr. Marianne*



Edmonton,  
Alberta

## ***Current Employment:***

Science Advisor, Environmental Affairs Branch, Alberta Department of Energy, 1990 to present.

## ***Career:***

Associate Research Officer, Senior Research Officer and Department Head, Alberta Research Council, 1974-90. Senior Research Officer, Council for Scientific and Industrial Research (CSIR), South Africa, 1973-74. Research Meteorologist, South Dakota School of Mines and Technology, 1972-73.

## ***Education and Professional***

### ***Designations:***

Advanced Marketing, Banff School of Management, 1988. Executive Development Program for Women, University of Alberta, 1986. Ph.D., Meteorology, McGill University, 1972. M.Sc., Meteorology, McGill University, 1964. B.Sc. (First Class Honours), Meteorology, McGill University, 1963.

## ***Contribution to Science:***

Marianne English is a meteorologist who developed and managed a program for the physical evaluation of cloud seeding for rain augmentation and hail suppression. Dr. English has more than 50 publications to her credit in the fields of climate change, air quality, cloud/precipitation physics, cloud modelling and weather modification. She is a resource person for a government/industry air quality forum and is a member of numerous review, advisory and program committees. In 1974 she was awarded the President's Prize by the Canadian Meteorological Society for distinguished scientific work.

# *FAIRHURST, Dr. Mary T.*



Sherwood Park,  
Alberta

## ***Current Employment:***

Research Associate, Dow Chemical Canada Inc.,  
Fort Saskatchewan, 1991 to present.

## ***Career:***

Research Leader, Chlor-Alkali Research Group,  
1989-91; Laboratory Supervisor, Chlor-Alkali  
Laboratory, 1985-89; Senior Analytical  
Chemist, Central Analytical Laboratory,  
1981-85, Dow Chemical Canada Inc.

## ***Education and Professional Designations:***

Postdoctoral Fellow, Trace Analysis Research  
Centre, Dalhousie University, Nova Scotia,  
1975-76. Ph.D., Analytical Chemistry,  
University of Alberta, 1975. B.Sc. (Honours),  
Chemistry, Marianopolis College, University of  
Montréal, Québec, 1967.

## ***Boards, Councils and Associations:***

Past President, Edmonton Section, Chemical  
Institute of Canada.

## ***Contribution to Science:***

Mary T. Fairhurst is a senior research associate  
whose career in analytical chemistry involves  
directing research activities of chemists,  
engineers and technologists. Outreach in  
the community includes executive positions on  
several committees and involvement in various  
educational programs including "Partners in  
Education" and "Stepping Stones". She spent  
two years as a CUSO volunteer teaching  
chemistry in Africa.



# FANNING, Dr. E. Anne



Edmonton,  
Alberta

## ***Current Employment:***

Professor, Faculty of Medicine, Division of Infectious Diseases, University of Alberta, 1992 to present. Director of Tuberculosis Services, Alberta Health Department, 1987 to present. Consultant, Provincial Laboratory, Mycobacteriology, 1986 to present. Cross appointment, Department of Medicine, Medical Microbiology and Infectious Diseases, 1986 to present. Consultant, Edmonton Tuberculosis Clinic, 1981 to present.

## ***Career:***

Associate Professor, Faculty of Medicine, Division of Infectious Diseases, University of Alberta, 1985-92. Acting Director, Division of Infectious Diseases, University of Alberta, 1986-87. General internal medicine practice, Allin Clinic, Edmonton, 1970-71.

## ***Education and Professional Designations:***

Sub-Specialty Fellow - Infectious Disease, 1971-72. FRCP(C) Internal Medicine, 1970. Teaching Fellow, Internal Medicine, 1969-70. Internal medicine residency, University of Alberta, 1967-69. Medical residency, Royal Alexandra Hospital, Edmonton, 1965-69. Psychiatry residency, Children's Psychiatric

Research Institute, Ontario, 1964-65. Internship, Montréal General Hospital, Québec, 1963-64. M.D., University of Western Ontario, 1963.

## ***Boards, Councils and Associations:***

Chair, Committee on Equality and Respect, Faculty of Medicine, University of Alberta, 1991 to present. Committee to rewrite Canadian Tuberculosis Standards, 1991 to present. Liaison Committee Member, Canada Medical/Canadian Bar Association, 1990-92. Chair, Aboriginal Health Care Careers Committee, Faculty of Medicine, University of Alberta, 1985-92. Chair, Infection Control Committee, University of Alberta Hospitals, 1983-86.

## ***Contribution to Science:***

E. Anne Fanning is currently pursuing research projects on tuberculosis epidemiology and risk factors underlying rising rates of tuberculosis in Alberta. She is responsible for tuberculosis surveillance and treatment in Alberta and is a member of the Faculty Tuberculosis Research group. She presently chairs a faculty-wide network on well-being which has evolved from the Equality Committee. She is also involved with three committees of the International Union Against Tuberculosis and Lung Disease in Paris. Other topics of concern to her are aboriginal health, international health and women's issues.

# *FIELD, Dr. L. Leigh*



Calgary,  
Alberta

## ***Current Employment:***

Professor, Department of Pediatrics, Division of Medical Genetics, University of Calgary and Alberta Children's Hospital, 1992 to present. Alberta Heritage Foundation for Medical Research (AHFMR) Scientist, Department of Pediatrics, Division of Medical Genetics, University of Calgary, 1990 to present.

## ***Career:***

Associate Professor, Department of Pediatrics, University of Calgary, 1987-92. Alberta Heritage Medical Scholar, Department of Pediatrics, University of Calgary, 1985-90. Visiting Professor, Department of Human Genetics, Medical College of Virginia, U.S.A., 1990. Visiting Professor, Division of Medical Genetics, University of California, Los Angeles, U.S.A., 1989. Assistant Professor, Department of Pediatrics and Community Health Sciences, University of Calgary, 1982-87. Assistant Researcher (Genetics), Department of Psychiatry, University of California, Los Angeles, 1981-82.

## ***Education and***

### ***Professional Designations:***

Ph.D., Population Genetics, University of Toronto, 1980. M.A. (First Class), Physical Anthropology, University of Toronto, 1975. B.Sc. (First Class), Zoology, University of British Columbia, 1974.

## ***Boards, Councils and***

### ***Associations:***

Western Director, Genetics Society of Canada, 1991 to present. Chair, Human Genetics Interest Group, Genetics Society of Canada, 1986-88.

## ***Contribution to Science:***

L. Leigh Field is a Heritage Medical Scientist, the most senior AHFMR award given to researchers of international stature. She is a member of the "Genetic Basis of Human Disease" national Network of Centres of Excellence. Dr. Field studies the genetic susceptibility to juvenile diabetes and has identified 4 genetic regions involved, being the first to show that susceptibility genes in 2 specific regions interact. She is also studying the genetic susceptibility to cleft lip/palate and a specific type of dyslexia. An international lecturer on human gene mapping, diabetes and other topics, she is also author of over 100 publications and abstracts. She presently chairs the Medical Genetics Research Group as well as the Search Committee for Medical Genetics Research.

# FRASER, Dr. Joanna



Lethbridge,  
Alberta

## ***Current Employment:***

Research Scientist, Forage Agronomy and Physiology, Agriculture Canada Research Station, 1989 to present.

## ***Career:***

Associate Professor, Department of Plant Science, Nova Scotia Agricultural College, 1982-89. Postdoctoral Fellow, Department of Plant Science, University of British Columbia, 1981-82. Postdoctoral Research Associate, Department of Agronomy, University of Kentucky, U.S.A., 1979-81. D.S.I.R. Research Fellow, Department of Plant Science, Lincoln College, University of Canterbury, New Zealand, 1976-78. Secretary, Audio Visual Aids Department, London University, Chelsea College Centre for Science Education, U.K., 1969-71.

## ***Education and Professional***

### ***Designations:***

Ph.D., Agronomy/Crop Physiology, Lincoln University College of Agriculture, University of Canterbury, 1978. M.Sc., Soil Science, Aberdeen University, Scotland, 1975. B.Sc. (Honours), Botany/Geography, Bedford College, London University, U.K., 1974.

## ***Contribution to Science:***

Joanna Fraser is a research scientist in forage agronomy and physiology, having evaluated a number of white clover cultivars of which are now being used by producers in Canada. She addresses producer problems, developing practical and integrated management strategies which contribute to a more economically and environmentally sustainable agriculture. In her previous position, Dr. Fraser developed courses, with lectures and laboratory manuals, as well as technician programs such as a recent Plant Science Technician syllabus for use at Nova Scotia Agricultural College. As an active professional she does forage agronomy and physiology research and also reviews internal and external scientific manuscripts. She serves in an advisory capacity, providing leadership in several professional groups and reaching out to the community. She has judged at science fairs, role modelled for the "Stepping Stones" program and has also helped foreign students and visitors adapt to Canadian culture.

# *FROST, Dr. Laura S.*



Edmonton,  
Alberta

## ***Current Employment:***

Associate Professor, Department of Microbiology, University of Alberta, 1990 to present.

## ***Career:***

Visiting Research Associate, Biochemistry, Department of Molecular Biology, University of Edinburgh, Scotland, 1981 and 1983.

Research Associate, Biochemistry, University of Alberta, 1979-89.

## ***Education and Professional***

### ***Designations:***

Ph.D., Biochemistry, University of Alberta, 1978. B.Sc., Biochemistry, University of Alberta, 1970.

## ***Contribution to Science:***

Laura S. Frost, microbiologist, is researching problems in plasmid transfer (bacterial conjugation) which is responsible for the dissemination of genes for medically and commercially important microbial processes such as antibiotic resistance and hydrocarbon utilization. She is currently investigating mating pair formation in *E. coli* and between bacteria of different genera. Presently, she is teaching courses in Introductory Virology and Molecular Microbiology. She has presented papers at many international conferences and symposia and has authored numerous papers and reviews.



# *GEE, Professor Margaret I.*



Edmonton,  
Alberta

## ***Current Employment:***

Professor, Department of Food Science and Nutrition, University of Alberta, 1985 to present.

## ***Career:***

Associate Professor, Department of Foods and Nutrition, University of Alberta, 1971-85.

Assistant Professor, Faculty of Home Economics, University of Alberta, 1970-71.

Lecturer, Faculty of Home Economics, University of Alberta, 1965-70. Music

Teacher, 1964-70. Homemaker, 1960-64.

Research Chemist, Research and Development Department, Chemcell (Celanese Canada

Inc.), Edmonton, 1960. Biochemist, Clinical Investigation Unit, Ontario Cancer Institute,

Toronto, 1959. Senior Chemist, Canadian Chemical Co. Ltd. (Celanese Canada Inc.),

Edmonton, 1953-58.

## ***Education and Professional***

### ***Designations:***

B.Sc., Household Economics, University of Alberta, 1951. M.Sc., Biochemistry, University of Alberta, 1953. Associate, Royal Conservatory of Music of Toronto (piano). Nutrition courses, Syracuse University, North Dakota State University and Morehead State University, U.S.A., 1972-74.

## ***Boards, Councils and***

### ***Associations:***

Chair, Nutrition Services Committee, Alberta Registered Dietitian's Association (ARDA), 1974-78. Vice President, ARDA, 1972-73.

## ***Contribution to Science:***

Margaret I. Gee is conducting studies to determine whether high fiber (barley, oat bran) bread products in the diet improve the metabolic control of Type II diabetics. Other research topics include effects on dietary manipulation on risk factors (heart health) and relationships between diet and taste perception. She has done significant research on the role of diet in minimizing the adverse effects of disease (e.g. Crohn's disease). She teaches courses in clinical dietetics.

# *GERBER, Gloria E.*



Edmonton,  
Alberta

## ***Current Employment:***

Senior Project Engineer, Thurber Group, 1985 to present.

## ***Career:***

Research Engineer, University of Alberta, 1984. Geotechnical Engineer, Thurber Consultants Ltd., 1981-83.

## ***Education and Professional Designations:***

P.Eng. M.Eng. (Geotechnical Engineering), University of Alberta, 1989. B.Sc. (Civil Engineering), University of Alberta, 1981.

## ***Boards, Councils and Associations:***

Executive Member at Large, Canadian Society of Civil Engineers, 1992-94. Past Treasurer, Association of Women in Engineering and Science.

## ***Contribution to Science:***

Gloria E. Gerber has been responsible for a variety of investigations for tunnelling, foundation design and land development projects. She was Geotechnical Project Engineer for the LRT tunnel alignment in Edmonton and has also completed highway and freeway work in her area of speciality. Author of several publications on slope stability and other geotechnical topics, she is also active in several professional groups. As a member of the Association of Women in Engineering she has been instrumental in the establishment of the Edmonton chapter of that group.

# *GIVEN, Mary M.* Calgary, Alberta

## ***Current Employment:***

Petroleum Exploration Consultant, 1993  
to present.

## ***Career:***

Manager - Frontier Exploration, 1992-93;  
Manager - Foothills Exploration, 1988-92;  
Manager, Exploration Research, 1984-88;  
Supervisor, Geochemistry, 1977-84;  
Exploration Geologist, East Coast Offshore and  
Alberta Foothills, 1971-77, Shell Canada  
Limited.

## ***Education and Professional Designations:***

P.Geol. M.Sc., Geology, University of Alberta,  
1969. B.Sc. (Honours), Geology, University of  
Alberta, 1968.

## ***Contribution to Science:***

Mary M. Given is a consultant with a distinguished career in petroleum exploration. She has published papers on the "Mesozoic and Early Cenozoic Geology of Offshore Nova Scotia" and "Microfauna from the Upper Cretaceous Bearpaw Formation in Southcentral Alberta." Active in the Canadian Society of Petroleum Geologists (CSPG), she has served on that group's Cross Section Committee. From 1969 to 1971, she was the recipient of the National Research Council of Canada scholarship.

# *GLENN, Patricia* Calgary, Alberta

## ***Current Employment:***

President and Chief Executive Officer, Proactive Technology Trading Ltd., 1992 to present. President, InteCura Consulting Inc., 1990 to present.

## ***Career:***

Vice President, VSL, 1987-90. President, Information Management Consulting, 1982-92. Systems Manager and Acting Director, Alberta Municipal Affairs, Government of Alberta, 1977-81. Acting Section Head, Agriculture Canada, Government of Canada, 1973-77.

## ***Education and Professional***

### ***Designations:***

B.Sc., University of Manitoba, 1967.

## ***Boards, Councils and***

### ***Associations:***

Chair, Subcommittee on Alberta in the Future and the Role of Science and Technology, Premier's Council on Science and Technology Member, Ministerial Advisory Committee on Land Related Information Systems (Alberta). Director, Edmonton Council for Advanced Technology. Chair, Professional Society Liaison, Canadian Information Processing Society (CIPS), 1991 to present. National President, 1988-89, National Board Executive, 1984-90, President, Edmonton Section, 1983-84, CIPS.

## ***Contribution to Science:***

Patricia Glenn is actively involved in the international brokering of technology goods and services, and in the provision of management consulting services in information technology. She has made an outstanding contribution to the Canadian Information Processing Society. As former President of the Edmonton section, she fostered its growth to become the second largest branch in the country. As national board member and President in 1988-89 she was a tireless champion of professional certification. She has also established links with the Science Council of Canada and was CIPS representative on the board of the Canadian Advanced Technology Association. She currently represents CIPS on the International Federation of Information Processing and the South East Asia Computer Confederation. She chairs the CIPS Professional Society Liaison Committee. She is the co-founder and co-chair of the Canadian Software Quality Forum and the Federation of the Associations of Science and Technology (Canadian).



# GOOBIE, Dr. Lorraine M.A.



Calgary,  
Alberta

## ***Current Employment:***

Division Engineer – Oil Development, Shell Canada Limited, 1993 to present

## ***Career:***

Manager, Gas Field Planning Software Development, 1989–91; Supervisor, Gas Reservoir Engineering, 1986–89; Research Reservoir Engineer, 1982–86; Shell Canada Limited.

## ***Education and Professional Designations:***

P.Eng. Ph.D., Chemical, Engineering (Heat Transfer), University of New Brunswick, 1982.  
B.Sc., Chemistry, Memorial University of Newfoundland, 1978.

## ***Boards, Councils and Associations:***

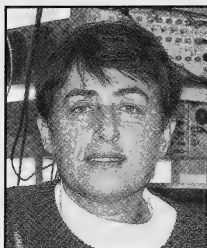
Corporate Member, Alberta Chamber of Resources, Oil Sands Task Force (ACR-OSTF).  
Corporate Member, Computer Modelling Group (CMG), Management Committee.

## ***Contribution to Science:***

Lorraine M.A. Goobie has attained recognition as a petroleum engineer, specializing in reservoir engineering. She is recognized within the Shell Royal Dutch group of companies for her contributions in numerical simulation.

Within the petroleum community, Lorraine is primarily recognized for her contributions to oil sands *in situ* technology. In October, 1992, Lorraine presented two papers at the Unconventional Hydrocarbon Symposium in St. Petersburg, Russia, for which she won the “Foreign Scientist Award” for her contributions. She enjoys technical presentations and averages several a year external to Shell. Lorraine has been an invited lecturer at several universities, her *alma mater*, Stanford University, the University of Calgary and the University of Alberta. She is a member of the Alberta Stepping Stones program, where women in non-traditional careers assist teachers by representing role models and mentors for young students. Lorraine is also a member of the University of Calgary Data Bank of Women Leaders. She is active in the area of women in science and technology and has a deep interest in education.

# GORDON, Dr. Tessa



Edmonton,  
Alberta

Assistant Lecturer, Department of Physiology,  
University College of Rhodesia, 1967-68.

## ***Education and Professional Designations:***

Ph.D., Physiology, University of Birmingham, 1972. M.Sc., Physiology, University of Birmingham, 1969. B.Sc., Physiology and Psychology, University of Cape Town, South Africa, 1966.

## ***Boards, Councils and Associations:***

Executive Board Member, Canadian Association for Neuroscience.

## ***Contribution to Science:***

Tessa Gordon studies the recovery potential of the nerve/muscle system after spinal cord injury. She has shown that neurons sending signals to muscles retain their ability to regenerate, subsequently supplying more muscle fibres than usual, if required. The information she has discovered regarding artificial activation is being used by other Alberta researchers to develop innovative electrical stimulation therapy which helps paralysed people become more mobile. Dr. Gordon has earned an international reputation in the field of neuromuscular physiology and has read papers worldwide. Among other awards, she has received the Killam Annual Professorship and the MRC and AHFMR Career Awards.

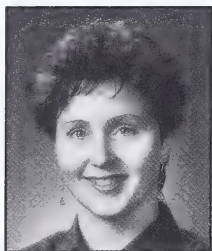
## ***Current Employment:***

Professor and Alberta Heritage Foundation for Medical Research (AHFMR) Scientist, Division of Neuroscience, Department of Pharmacology, Rehabilitation Neuroscience Research Group, University of Alberta, 1992 to present. Adjunct Professor, Department of Physical Therapy, Faculty of Rehabilitation Medicine, University of Alberta, 1989 to present.

## ***Career:***

Professor, Associate Professor and AHFMR Scholar, Division of Neuroscience, Department of Pharmacology, Rehabilitation Neuroscience Research Group, University of Alberta, 1987-91. Associate Professor and Medical Research Council Scholar (MRC), Department of Pharmacology, University of Alberta, 1982-86. Assistant Professor and AHFMR Scholar, Department of Pharmacology, University of Alberta, 1981-82. Research Associate, Department of Physiology, University of Alberta, 1976-80. MRC Research Fellow, Department of Physiology, University of Birmingham, U.K., 1973-75. MRC Research Associate, Department of Physiology, University of Birmingham, 1972-73. Wellcome Research Postgraduate Student, Department of Physiology, University of Birmingham, 1969-71.

# GREENIDGE, Dorothy M.



Calgary,  
Alberta

## ***Current Employment:***

Senior Area Reservoir Engineer, Production Department, Gulf Canada Resources Limited, 1990 to present.

## ***Career:***

Senior Joint Interest Engineer, Development Division, Production Department, Gulf Canada Resources Limited, 1986-90. Coordinator, Molikpaq, Extended Flow Test Task Force, BeauDril Ltd., 1986. Operations Engineer, BeauDril Ltd., 1983-86. Project Engineer, Beaufort Sea Drilling System, Gulf Canada Resources Inc., 1982-83. Design Engineer, Frontier Development, Gulf Canada Resources Inc., 1981. Research Engineer, Technical University of Nova Scotia, 1980.

## ***Education and Professional***

### ***Designations:***

P.Eng. M.A.Sc., Applied Mechanics, Technical University of Nova Scotia, 1982. B.Eng., Mechanical Engineering, Technical University of Nova Scotia, 1980. B.Sc., Mathematics, Mount Allison University, 1978.

## ***Boards, Councils and Associations:***

Member, Advisory Council, Cooperative Education, University of Victoria, 1993-97.

## ***Contribution to Science:***

Dorothy M. Greenidge, a senior reservoir engineer, is responsible for reservoir management and optimization of oil recovery. Other facets of her career include preparation of production forecasts and economic evaluations of technical proposals. As Senior Project Engineer, she was part of a design and construction team building Arctic offshore drilling rigs, one of which was the drilling caisson 'Molikpaq.' She has also acted as advisor to the Canadian Coast Guard on regulations pertaining to drilling equipment. Affiliated with many professional groups, for 2 years she was newsletter Editor for the Association of Women in Engineering and Science. As co-op engineering recruiter for her company, she does on-campus recruiting of students, speaking about careers in engineering and serving as a positive role model for females. A dedicated volunteer, she helps with "Junior Achievement" and "Minerva" programs.

# *HARLEY, Dr. Frances L.* Edmonton, Alberta

## ***Current Employment:***

Professor, Departments of Pediatrics and Internal Medicine, University of Alberta Medical School, 1983 to present. Clinical appointments – University of Alberta Hospitals Transplant Committee, 1977 to present; and the Renal Clinic, 1972 to present. Attending staff, University of Alberta Hospitals, 1972 to present. Consultant, Royal Alexandra Hospital, Misericordia Hospital, Edmonton General Hospital, Charles Camsell Hospital, 1972 to present.

## ***Career:***

Acting Chair, Department of Pediatrics, University of Alberta Hospital, 1984-86. Director, Nephrology Residency Training Program, 1982-84. Acting Director, Pediatric Ambulatory Clinic, 1977-78. Associate Professor, Departments of Pediatrics and Internal Medicine, University of Alberta Medical School, 1977. Director, Cystic Fibrosis Clinic, 1976-82. Director, Pre-school Hearing Clinic, 1974-78. Pediatrician, Myelomeningocele Clinic, 1972-78, Cleft Palate Clinic, 1972-77, Cystic Fibrosis Clinic, 1972-76. Assistant Professor, Department of Pediatrics, University of Alberta Medical School, 1972. Fellow, Department of Pediatrics, University of Alberta Medical School, 1971-72.

## ***Education and Professional***

### ***Designations:***

F.R.C.P.(C). M.D., University of Western Ontario, 1965. B.A., Smith College, U.S.A., 1961.

## ***Boards, Councils and***

### ***Associations:***

President, Pediatric Nephrology Section, Canadian Society of Nephrology, 1986 to present. Executive Committee, Medical and Scientific Advisory Committee, Canadian Cystic Fibrosis Foundation, 1984-88. Clinic Committee, Canadian Cystic Fibrosis Foundation, 1981-88.

## ***Contribution to Science:***

Frances L. Harley has made contributions through her research in the area of growth and development of children in end stage renal failure, as well as on the immunological monitoring of cystic fibrosis patients. Author of many publications, she also teaches resident interns and pharmacy students. Dr. Harley has clinical responsibilities in pediatric nephrology consultation, dialysis and kidney transplantation for a large section of Alberta, British Columbia and Saskatchewan. A current special interest is the delivery of advanced care to remote populations, and the standardization of care for asthma patients through the design of evaluation treatment guidelines. She is a member of many professional groups and has served on national committees, among them the Canadian Cystic Fibrosis Foundation.



# HAWRYSH, Dr. Zenia J.



Edmonton,  
Alberta

## ***Current Employment:***

Professor, Department of Food Science and Nutrition, Faculty of Home Economics, University of Alberta, 1976 to present.

## ***Career:***

Chair, Department of Food Science and Nutrition, University of Alberta, 1980-93. Associate Professor, School of Home Economics, University of Alberta, 1971-76. Graduate Assistant, Department of Food Science, Michigan State University, U.S.A., 1969-70. Assistant Professor, School of Home Economics, University of Alberta, 1962-66. Lecturer, School of Home Economics, University of Alberta, 1960-62.

## ***Education and Professional Designations:***

Ph.D. (Food Science), Michigan State University, 1970. M.S. (Foods), Michigan State University, 1960. B.Sc. (Home Economics) University of Alberta, 1959.

## ***Boards, Councils and Associations:***

Canadian Sensory Advisory Committee, International Standards Organization. Member, Education Committee, Sensory Evaluation Division, Institute of Food Technologists. Member, Food Studies Focus Group, Alberta

Education. Director, Provincial Nutrition Task Committee, Alberta Health Units. Past Member, Northern Alberta Institute of Technology Advisory Committee (Dietary Program). Past Member, Alberta Food Processing Industry Advisory Council, Alberta Registered Dietitians Association. Past Chair, Sensory Evaluation Group, Canadian Institute of Food Science and Technology.

## ***Contribution to Science:***

Zenia J. Hawrysh has a distinguished record of research in food science and nutrition, particularly in the areas of sensory and objective evaluations of food quality. She has focused on topics such as quality evaluation of canola oil, meat and fish, measurement of taste perception in different age groups and disease conditions, and the acceptability of institutional foods. As well as her own dedication to research, Dr. Hawrysh has devoted much energy to ensuring the education of the next generation of scholars in food quality. Her knowledge has benefited the community through Department of Extension diet therapy workshops, current topics in food and nutrition, convenience foods, and nutritional needs of the elderly. Dr. Hawrysh is a recipient of the "Distinguished Alumni Award", Department of Food Science and Human Nutrition, Michigan State University, and the Canadian Home Economics Association "Major Body of Research Accomplishments Award".

# HEIN, Dr. Frances J.



Calgary,  
Alberta

## ***Current Employment:***

Adjunct Professor, Department of Geology and Geophysics, University of Calgary, 1989 to present.

## ***Career:***

Honourary Research Associate, Department of Geology, Dalhousie University, Nova Scotia, 1986-89. Assistant Professor, Department of Geology, University of Alberta, 1982-86. Visiting Assistant Professor/Sessional Lecturer, Department of Geology, University of Alberta, 1980-82. Postdoctoral Fellow/Sessional Lecturer, Department of Geology, University of Southern California, Los Angeles, U.S.A., 1978-80.

## ***Education and Professional***

### ***Designations:***

P.Geol. Ph.D., Geology, McMaster University, Ontario, 1979. M.Sc., Geology, McMaster University, 1974. B.S., Geology, University of Illinois, U.S.A., 1972.

## ***Boards, Councils and Associations:***

Fellow, Councillor, Geological Association of Canada. Past President, Edmonton Geological Society.

## ***Contribution to Science:***

Frances J. Hein is a teacher and researcher in the geological sciences – fundamental and applied. With a lengthy and impressive publication record, she has researched topics such as zinc/lead deposits, offshore shelf deposits, sandstones and conglomerates.

Dr. Hein has supervised over 15 graduate students in the past decade. Active in national science organizations she has popularized science and is an excellent role model for female students. Involved in the Calgary Science Hotline and Scientists in the School programs, she also serves the community as a Science Fair Judge.

# HEPBURN, Alison J.



Calgary,  
Alberta

## ***Current Employment:***

Chair, Public Affairs Committee, Canadian Society of Petroleum Geologists (CSPG), 1990 to July 1, 1993.

## ***Career:***

Chief Geologist, Comaplex Resources International Ltd., 1987-90. Senior Geologist, ICG Resources Ltd., 1985-87. Senior Project Geologist, Esso Resources Canada Ltd., 1978-85.

## ***Education and Professional Designations:***

B.Sc., Geology, University of Calgary, 1977.  
B.Sc., Environmental Biology, (Minor / Geology), University of Calgary, 1976.

## ***Boards, Councils and Associations:***

Advisory Council, Eau Claire Y.M.C.A., 1988 to present.

## ***Contribution to Science:***

Alison J. Hepburn, as Chairman for the Public Affairs Committee of her professional society, has promoted public awareness of science through Career Days, Science and Technology displays, and speakers in the classroom. She was Chief Geologist for Comaplex Resources and has also had experience as a Senior Project Geologist. An active community volunteer, she has given time to many groups, including Science Hotline Calgary and "Operation Minerva".

# *HICKS, Dr. Faye E.*



Sherwood Park,  
Alberta

## ***Current Employment:***

Associate Professor, Department of Civil Engineering, University of Alberta, 1991 to present.

## ***Career:***

Assistant Professor, Department of Civil Engineering, University of Alberta, 1989-91.  
Sessional Lecturer, Department of Civil Engineering, University of Alberta, 1989.  
River Engineer, River Engineering Branch, Department of the Environment, Government of Alberta, 1981-86.

## ***Education and Professional***

### ***Designations:***

P.Eng. Ph.D. (Civil Engineering), University of Alberta, 1990. M.Sc. (Civil Engineering), University of Alberta, 1985. B.Sc. (Civil Engineering), University of New Brunswick, 1981.

## ***Boards, Councils and***

### ***Associations:***

Board of Directors, Western Division, Canadian Water Resources Association. Executive Committee, Hydrotechnical Division, Canadian Society of Civil Engineers.

## ***Contribution to Science:***

Faye E. Hicks began her career as a river engineer and is now an Associate Professor involved in research pertaining to topics such as ice breakup, flood routing and compound channel flow. She encourages women toward engineering fields both through her vocation and attendant professional groups and as a member of Women in Scholarship, Engineering, Science and Technology (WISEST). As a researcher and resource person she provides advice to engineering consultants and government agencies when it involves application of research related expertise.



# *HINTON, Sheila J.*



Calgary,  
Alberta

## ***Current Employment:***

Supervisor of Contracts, Sales Contracts Department, Alberta and Southern Gas Co. Ltd., 1992 to present.

## ***Career:***

Supervising Geologist – Reserves Department, 1989-92; Senior Geologist, 1986-89; Geologist, 1981-86, Alberta and Southern Gas Co. Ltd. Geologist-in-training, TransCanada PipeLines, 1980-81. Field Geologist, Uranerz Exploration and Mining, summers 1978 and 1979.

## ***Education and Professional***

### ***Designations:***

P.Geol. B.Sc. (Honours), Geological Sciences, Queen's University, Ontario, 1979.

## ***Boards, Councils and***

### ***Associations:***

Director, Canadian Society of Petroleum Geologists (CSPG) Educational Trust Fund, 1992 to present. Treasurer, CSPG, 1990. Director, Assistant Treasurer, CSPG, 1989.

## ***Contribution to Science:***

Sheila J. Hinton, as Supervisor of Contracts for her company, has responsibilities which include contract administration, gas sales and contract negotiations. She has served as a technical witness before the National Energy Board. Many organizations have gained from her capable leadership. She has served on the Executive of the Canadian Society of Petroleum Geologists, the United Way, the Calgary Science Fair and the Calgary Women's Emergency Shelter.

# HOLIZKI, Lynda D.



Calgary,  
Alberta

## ***Current Employment:***

Assistant Manager, Gas Department, Energy Resources Conservation Board (ERCB), 1990 to present.

## ***Career:***

Environment Protection Department, Air and Waste Project Coordinator, 1986-90; Gas Department, (Reservoir Engineering and Gas Removal Policy), 1979-85; Environment Protection Department (Risk Assessment & Atmospheric Science), 1976-79, ERCB.

## ***Education and Professional***

### ***Designations:***

P.Eng. B.Sc. Chemical Engineering, University of Saskatchewan, 1976.

## ***Boards, Councils and***

### ***Associations:***

Board of Directors, Riverside Villa Association, Women's Alcohol and Drug Addiction Treatment Facility.

## ***Contribution to Science:***

Lynda D. Holizki was the project coordinator for a major public, industry and government field measurement research project on north-east Calgary risk and safety issues. She has been involved with sour gas safety issues since the late seventies. Currently a team leader on diversity and equity in the workplace, she also serves as a speaker within the Calgary school system on careers in engineering as they pertain to women.

# HOWES, Barbara J.



Calgary,  
Alberta

## ***Current Employment:***

President, Barbara Howes Petroleum Consulting Inc., 1989 to present.

## ***Career:***

Division Reservoir Engineer, Southeast Division, 1989; Supervisor Technical Systems, Production Systems Group, 1988-89; Senior Petroleum Engineering Associate, Production Systems Group, 1988; Senior Petroleum Engineering Associate, Special Projects Group (Enhanced Oil Recovery), 1985-88; Petroleum Engineering Supervisor and Petroleum Engineering Associate, Special Projects Group (Enhanced Oil Recovery), 1979-84, Amoco Canada Petroleum Company Ltd.

## ***Education and Professional***

### ***Designations:***

P.Eng. B.Sc., Mechanical Engineering (with Distinction), University of Calgary, 1970.

## ***Boards, Councils and***

### ***Associations:***

Chair-Elect, Petroleum Society, Canadian Institute of Mining, Metallurgy and Petroleum (CIM). First Treasurer, Association of Women in Engineering and Science (AWES). Member, Advisory Council, EngIT Engineering Services Ltd.

## ***Contribution to Science:***

Barbara J. Howes is skilled in many aspects of reservoir engineering and is president of her own consulting firm. She specializes in enhanced oil recovery application and economics. Professional activities have included duties as internal company consultant, course developer/teacher, advisor to the Economic Council of Canada and designer/evaluator for enhanced oil recovery projects. She has served on the executive of the Petroleum Society of the Canadian Institute of Mining, Metallurgy and Petroleum in the Calgary Section and nationally. She is a founding member of the Association of Women Engineers and participant in program and career counselling committees. A role model for prospective female engineers, she was the first woman to graduate in Engineering from the University of Calgary and the first female engineer at Amoco Canada.

# JACOBS-KAUFMAN, Dr. Susan



Edmonton,  
Alberta

Zoology, McGill University, 1967 B.Sc.,  
Chemistry, University College, London,  
U.K., 1965.

## ***Boards, Councils and Associations:***

Member, Internal Review Committee, Heart  
and Stroke Foundation of Canada. Member,  
Internal Review Committee, Medical Research  
Council (MRC).

## ***Contribution to Science:***

Susan Jacobs-Kaufman has made significant  
contributions to cardiovascular research in  
Canada with information which may lead  
to new treatments for high blood pressure.  
She has also made discoveries on how blood  
pressure is maintained during normal healthy  
pregnancies – a prelude to understanding  
the 5 percent of pregnancies which exhibit  
dangerously high levels. Frequently invited  
to speak at international symposia, she has  
many publications to her credit. At the  
faculty level, she has been an active member  
of the Animal Welfare Committee which is  
charged with reviewing all research protocol  
involving animals. She has also served on  
the Academic Appeals Committee and the  
editorial board of the "Bulletin" (a publica-  
tion distributed to the University and  
business community). For many years she  
has been involved in the "Stepping Stones"  
program.

## ***Current Employment:***

Professor and Alberta Heritage Foundation  
for Medical Research (AHFMR) Scholar,  
Department of Medicine, University of  
Alberta, 1992 to present.

## ***Career:***

Associate Professor and AHFMR Scholar,  
Department of Medicine, University of  
Alberta, 1983-92. Assistant Professor and  
Canadian Heart Foundation Scholar,  
Department of Medicine, University of  
Alberta, 1980-83. Assistant Professor,  
Department of Obstetrics and Gynaecology,  
University of Alberta, 1979-80. Research  
Associate, Department of Obstetrics and  
Gynaecology and SMRI, University of Alberta,  
1977-79. Premiere Assistant Diplomee,  
Institut de Pharmacologie, Universite de  
Lausanne, Switzerland, 1975-77. Science  
Research Council Fellow, (Zoology) and  
Senior Research Worker (Physiology),  
Cambridge University, U.K., 1971-74.

## ***Education and Professional Designations:***

Ph.D., Zoology, University of British  
Columbia, Vancouver, B.C., 1971. M.Sc.,



# *JEFFERIES, Glenna J.*



Calgary,  
Alberta

## ***Current Employment:***

Senior Production Engineer, Conventional Oil and Gas, Husky Oil Operations Ltd., 1988 to present.

## ***Career:***

Economic Analyst, Corporate Economics, Husky Oil Operations Ltd., 1986-88. Project Planner, Development Engineering, 1984-86; Reservoir Engineer, Development Engineering, 1981-83, Gulf Canada Resources Limited.

## ***Education and Professional***

### ***Designations:***

P.Eng. B.Sc. (Engineering), University of Alberta, 1981.

## ***Boards, Councils and***

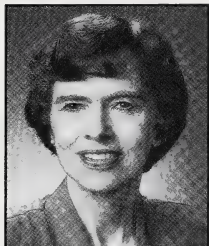
### ***Associations:***

Chair, Alberta Women's Science Network, 1992-93. Member, Enforcement Review Committee, Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA), 1991-93. President, Association of Women in Engineering and Science (AWES), 1987-88.

## ***Contribution to Science:***

Glenna J. Jefferies' position as senior production engineer was preceded by experience in other facets of her profession: economic evaluation, project planning and reservoir engineering. Encouraging science students at several levels, she does career counselling in schools, judges at the Calgary Regional Science Fair (French Section) and is on the "Alberta Stepping Stones" mentor list. She is Chair for the Alberta Women's Science Network and recently co-authored a paper titled "Attracting and Keeping Women in the Sciences."

# JENNETT, Dr. Penny A.



Calgary,  
Alberta

## ***Current Employment:***

Associate Professor, Office of Medical Education and Department of Community Health Sciences, Faculty of Medicine, University of Calgary, 1989 to present.

## ***Career:***

Assistant Professor, Department of Community Health Sciences, University of Calgary, 1987-89. Assistant Professor, Office of Medical Education, University of Calgary, 1985-89. Clinical Assistant Professor, and Research Associate, Division of Continuing Medical Education, University of Saskatchewan, 1982-85. Doctoral Fellow, Masters Fellow, and Graduate Assistant, Office of Medical Education Research and Development, College of Human Medicine, Michigan State University, U.S.A., 1979-82. Health Record Administrator, Saskatchewan, Ontario, Prairie Region, 1965-74; 1977-79. Research Assistant, Division of Continuing Medical Education, University of Saskatchewan, 1974-77; 1980.

## ***Education and Professional***

### ***Designations:***

Ph.D., Administration and Curriculum, Medical Education, Michigan State University, 1982.

M.A., Medical Education, Michigan State University, 1980. B.A. (With Distinction), Department of Psychology, University of Saskatchewan, 1977. Registered Medical Record Librarian (Health Record Administrator), Canadian Registration Exam, 1965. Medical Record Librarian, Regina Grey Nun's School for Medical Librarians, Saskatchewan, 1965.

## ***Boards, Councils and Associations:***

Chair, Association of Canadian Medical Colleges Research Committee, 1993 to present.

## ***Contribution to Science:***

Penny A. Jennett has worked on multiple externally funded medical education research projects. The findings from these activities have contributed to understanding future and practicing physician competence and performance, information management, and practice change. She was selected to be the first Ph.D. within a faculty of medicine to be awarded a \$75,000 scholarship by the Canadian Life and Health Association, and is a life member of the Honour Society of Phi Kappa Phi. Reviewer on many medical journals, she also chairs a research group and is the Chair for the Association of Canadian Medical Colleges Research Committee. She is the University of Calgary Women's Liaison to the Association of American Medical Colleges. A member of many professional groups, she has served on the executive of the Canadian, Ontario, and Saskatchewan Health Record Associations.

# *JENSEN, Dr. Susan E.* Edmonton, Alberta

## ***Current Employment:***

Professor, Department of Microbiology,  
University of Alberta, 1990 to present.

## ***Career:***

Associate Professor, Department of Microbiology, University of Alberta, 1984-90. Assistant Professor, Department of Microbiology, University of Alberta, 1981-84. Research Associate and Sessional Lecturer, Department of Microbiology, University of Alberta, 1977-81.

Postdoctoral Fellow, Department of Microbiology, University of British Columbia, 1974-76.

## ***Education and Professional***

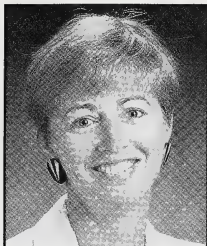
### ***Designations:***

Ph.D. (Microbiology), University of Alberta, 1975. B.Sc. (Household Economics), University of Alberta, 1970.

## ***Contribution to Science:***

Susan E. Jensen heads a research program which has grown into one of the foremost in the world for studying *Streptomyces* and antibiotic biosynthesis. Teacher of industrial microbiology, she has an extensive list of publications and presentations to her credit. She is a member of the National Advisory Committee on Biotechnology, Chair of the Natural Sciences and Engineering Research Council's (NSERC) Strategic Grants Panel for Biotechnology and is also a member of the Science and Technology Hotline in Edmonton.

# *JOHNSON-FLANAGAN, Dr. Anne M.*



Edmonton,  
Alberta

## ***Current Employment***

Associate Professor, Department of Plant Science, University of Alberta, 1991 to present.

## ***Career:***

Assistant Professor, Department of Plant Science, University of Alberta, 1987-91.

Research Associate, Pacific Forestry Centre, 1987. Postdoctoral Fellow, Plant Research Centre, 1984-87.

## ***Education and Professional***

### ***Designations:***

Ph.D., University of Victoria, 1985. M.Sc., University of Alberta, 1980. B.Sc., University of Victoria, 1978.

## ***Boards, Councils and Associations:***

Treasurer, Canadian Society for Plant Physiology, 1990-92.

## ***Contribution to Science:***

Anne Johnson-Flanagan is well known for her research on the freezing tolerance of crop plants, and the potential for genetic engineering. Her many publications and papers include extensive work on canola seeds and plants. She serves on several University committees and is Past Treasurer of the Canadian Society for Plant Physiology. Dr. Johnson-Flanagan is also joint organizer of Crop Molecular Biology and Biotechnology Workshops in Banff. She is a role model for the "Stepping Stones" program.



# JONES, Dr. Marlene



Calgary,  
Alberta

## ***Current Employment:***

Senior Scientist, Advanced Computing and Engineering Department, Alberta Research Council, 1987 to present. Adjunct Professor, Department of Computational Science, University of Saskatchewan, 1987 to present.

## ***Career:***

Tenured Associate Professor, Department of Computer Science, University of Waterloo, 1986-87. Assistant Professor, Department of Computer Science, University of Waterloo, 1984-86. Associate Professor, Department of Computational Science, University of Saskatchewan, 1983. Assistant Professor, Department of Computational Science, University of Saskatchewan, 1982-83.

## ***Education and Professional Designations:***

M.Ed. (Education of Exceptional Children), University of Saskatchewan, 1982. Ph.D. (Computer Science), University of Toronto, 1980. M.Sc. (Computer Science), University of Toronto, 1977. B.Sc. (Computer Science and Mathematics), University of Toronto, 1976.

## ***Boards, Councils and Associations:***

Alberta Member, Telecommunications and Computer Services Sectoral Advisory Group on International Trade (SAGIT), 1991 to present. Member, Provincial Advisory Committee on Distance Education, 1990 to present. Co-chair, Nato Advanced Study Institute, 1990. Member, Subcommittee on Artificial Intelligence in Instructional Technology, National Research Council's Associate Committee on Instructional Technology, 1987-89. Member, Advisory Board, Institute of Computer-Assisted Learning (ICAL), University of Calgary, 1987-89.

## ***Contribution to Science:***

Marlene Jones, as a senior scientist, has guided a team in a major research venture to convert an existing curriculum and course design software to a flexible, easy to use, knowledge-based (expert) system. She is well known for her contributions to the artificial intelligence and education/training communities and is the Alberta Member on the Telecommunications and Computer Services Sectoral Advisory Group on International Trade. With over 80 publications to her credit she has served internationally as presenter, seminar organizer and keynote speaker. Dr. Jones' interests focus on industrial competitiveness and productivity.

# KIRWAN, Dr. Margaret F.



Grande Prairie,  
Alberta

## ***Current Employment:***

Chief of Staff, Queen Elizabeth II Hospital, Grande Prairie, 1988 to present. Family Physician, 1971 to present.

## ***Career:***

President, Medical Staff, Queen Elizabeth II Hospital, 1986-87. Chief of Medicine, Queen Elizabeth II Hospital, 1983-84. Chief of Pediatrics, Grande Prairie General Hospital, 1974.

## ***Education and Professional***

### ***Designations:***

M.B., B.Ch., B.A.O., Trinity College, Dublin, Ireland, 1968. B.A., Trinity College, 1966.

## ***Boards, Councils and***

### ***Associations:***

President-Elect, Alberta Medical Association, 1992-93. Board Member, Alberta Medical Association, 1987-92.

## ***Contribution to Science:***

Margaret F. Kirwan is a dedicated medical professional who has served the Grande Prairie community in her family practice for 22 years. She is committed to health care reform and has shared her knowledge and experience while serving on the Board of the Alberta Medical Association. Dr. Kirwan is Co-Vice President

of the Health and Medical Service of the Canada Winter Games, 1995. She is responsible for the coordination of all health and medical services for approximately 4,000 participants. Dr. Kirwan's involvement in the community extends beyond the medical field. In 1987, she co-chaired the United Way Campaign, the most successful campaign in Grande Prairie to that time. She also chaired the local Cool Aid Society, which was established to assist teenage runaways, prostitutes and drug abusers. This very effective program continues to be a valuable resource for Grande Prairie youth. In addition, Dr. Kirwan served on the Advisory Board of Planned Parenthood, a service in the community and schools to address teenage sexuality.

# LANGLO, Cynthia A.



Calgary,  
Alberta

## ***Current Employment:***

Manager, Geology Department, Energy Resources Conservation Board (ERCB), 1986 to present.

## ***Career:***

Assistant Manager (Computer Applications, Oil Sands), 1984-86; District Geologist (North-eastern Alberta), 1978-84; Senior Petroleum Geologist, 1968-78, ERCB.

## ***Education and Professional***

### ***Designations:***

P.Geol. One year post graduate work, University of Alberta, 1968. B.Sc., Geology, University of Alberta, 1967.

## ***Boards, Councils and***

### ***Associations:***

Past Executive Member, Canadian Well Logging Society (CWLS).

## ***Contribution to Science:***

Cynthia A. Langlo is responsible for a technical and professional staff of 60, who provide geological expertise and advice to the ERCB and various government and private agencies.

She is also responsible for the management and operation of the Core Research Centre which employs a staff of 30, and provides facilities for the viewing and study of core and samples from oil and gas wells drilled within Alberta. Her geological career has included experience in the development of computer applications, conventional oil and gas reserve assessments, and oil sands evaluation and mapping throughout the province. She has participated as an Examiner and acting board member in numerous hearings related to energy resource development issues and represents the ERCB on a number of external committees including the Prairie Conservation Coordinating Committee. Ms. Langlo has also been an executive of the CWLS.

# LEBLANC, Dr. Eileen L.



Edmonton,  
Alberta

## ***Current Employment:***

Associate Professor, Department of Food Science and Nutrition, University of Alberta, 1990 to present.

## ***Career:***

Associate Professor, Mount Saint Vincent University, Nova Scotia, 1988-90. Vice President, Sea-Agri Tech Limited, 1984-87. Assistant Professor, Mount Saint Vincent University, 1983-87 and 1979-80. Lecturer, Mount Saint Vincent University, 1976-79. Research Nutritionist, Bio-Research Laboratories, Quebec, 1975-76. Research Associate, Bio-Research Laboratories, 1973-74.

## ***Education and Professional***

### ***Designations:***

Ph.D, Food Science and Technology, Technical University of Nova Scotia, 1988. Professional Dietitian Certification, Royal Victoria Hospital, Quebec, 1975. M.Sc., Foods and Nutrition, University of Manitoba, 1973. B.Sc., Foods and Nutrition, St. Francis Xavier University, Nova Scotia, 1971.

## ***Contribution to Science:***

Eileen L. LeBlanc has researched the effect of various processing methods on the quality of food, and has been active in determining the effect of modified atmosphere packaging, superchilling and frozen storage temperature on a variety of foods – especially fish. She has many publications and papers to her credit on topics such as the sensory, textural and chemical quality of frozen fish, and effects on muscle proteins of stored seafoods. With a distinguished record of academic service she has implemented several laboratory programs and served on numerous faculty organizations such as the Science Review Committee. Some of the professional in-services she has presented concern food technology, consumer testing and food texture evaluation.



# LEGGETT, Sheila A.



Calgary,  
Alberta

## ***Current Employment:***

President, Sheila Leggett, Environmental Consultants Ltd., 1993 to present. Vice President, Jim Lore & Associates Ltd., 1987 to present.

## ***Career:***

Environmental Consultant, Tera Environmental Consultants (Alta.) Ltd., 1984-87. Biology Advisor, Terrestrial Environment, Chevron Canada Resources Ltd., 1980-84. Laboratory Technologist, Monenco Consultants Limited, 1979-80.

## ***Education and Professional***

### ***Designations:***

P.Biol. M.Sc., Biology, University of Calgary, 1987. B.Sc., Biology, McGill University, Quebec, 1979. D.E.C. in Science, Marianapolis CEGEP, 1976.

## ***Boards, Councils and***

### ***Associations:***

First Vice President, Canadian Society of Environmental Biologists. Director, Alberta Ecotrust Foundation.

## ***Contribution to Science:***

Sheila A. Leggett, biologist and environmental consultant, is a leading expert in the area of sulphur contaminated soils. Author of numerous publications on the reclamation of such soils, she is well known for her work on environmental issues, particularly relating to the assessment and remediation of contaminated sites from the oil and gas industry.

Sharing her knowledge, she has developed presentations about waste management for training purposes, and is mentor and role model for many young women in environmental science.

# LUETHY, Joyce



Calgary,  
Alberta

## ***Current Employment:***

Consultant, NETWORKS, 1993 to present.

Project Director, Operation Minerva, 1988 to present.

## ***Career:***

Assistant Principal, Calgary Board of Education (CBE), 1984-91. Science Teacher, CBE, 1983-84.

Assistant Principal, CBE, 1977-83. Science Consultant, CBE, 1974-77. Science Teacher, CBE, 1972-74. Science Teacher, CBE, 1967-70.

Research Assistant, University of Washington Medical School, U.S.A., 1960-63. Research Assistant, University of British Columbia Medical School, 1957-60. Laboratory Technician, University of Zurich, Switzerland, 1955-56.

## ***Education and Professional Designations:***

Coursework towards M.Sc., Educational Psychology, University of Calgary (Sabbatical), 1982-83. B.Ed., University of Calgary, 1970. Professional Teaching Certificate, University of Calgary, 1967. Coursework towards M.Sc., Immunology, University of Washington, U.S.A., 1961-62. B.Sc., Microbiology, University of California, Berkeley, U.S.A., 1954. B.A., Political Science, University of California, Berkeley, 1952.

## ***Boards, Councils and Associations:***

Director, Alberta Women's Science Network (AWSN). Science Council, Alberta Teacher's Association, 1970 to present.

## ***Contribution to Science:***

Joyce Luethy has a research science background and through her teaching and science consulting became part of a "women in science teaching" network which eventually became the core group for "Operation Minerva". She has made presentations on the topic of science and mathematics anxiety/avoidance among women and girls, and was instrumental in the development of the first Conference Minerva. Since 1987, she has been a member of the Association of Women Engineers and Scientists, an organization which has provided invaluable assistance in the job shadowing and workshop components of the Minerva program. She has travelled to rural areas in order to promote a Women's Science Network and as a result, several of these rural communities have held Minerva conferences. She is a Director with AWSN and active in several other professional organizations. She is currently organizing science and technology career conferences for Girl Guides which are funded by Energy, Mines and Resources, Government of Canada.

# *MALM, Dr. Sheila M.*



Calgary,  
Alberta

## ***Current Employment:***

Member, Low Risk Maternity Clinic referral service, University of Calgary/Foothills Medical Clinic, 1987 to present. Valley View Family Practice, 1985 to present. Clinical Assistant Professor, Faculty of Medicine, University of Calgary, 1984 to present. Active Staff, Alberta Children's Hospital, 1983 to present. Active Staff, Foothills Hospital, 1981 to present. Active Staff, District #7, Nursing Homes and Auxiliary Hospitals and Bethany Care Centre, 1980 to present. Teacher, Clinical Electives for medical students and residents in Family Practice, 1979 to present.

## ***Career:***

Market Mall Family Practice, 1981-85. Market Mall Surgi-Medical Centre, 1979-81. Postdoctoral Fellowship, National Research Councils of Canada, 1970-72. Statistics Consultant, Nepean Township, Ontario, 1970. Lecturer, Statistical Mechanics, Carleton University, Ottawa, 1970. Computer Systems Analyst, 1965-72.

## ***Education and Professional***

### ***Designations:***

Fellow, Canadian College of Family Practice, 1993. Certificant, Canadian College of Family

Practice, 1981. Residency, Department of Internal Medicine, Foothills Hospital, Calgary, 1976-78. M.D., Faculty of Medicine, University of Calgary, 1976. Pre-medicine, University of Calgary, 1972-73. Ph.D. (Theoretical Chemistry), University of Bristol, U.K., 1969. B.Sc. (Honours), Chemistry, University of Alberta, 1965.

## ***Boards, Councils and***

### ***Associations:***

President of Council, College of Physicians and Surgeons, 1991-93. Investigation Chair, College of Physicians and Surgeons, 1993. Member of Council, College of Physicians and Surgeons, 1988 to present.

## ***Contribution to Science:***

Sheila M. Malm, a full time practicing physician, was the first woman president of the College of Physicians and Surgeons of Alberta. With a background in theoretical chemistry she has published research papers in that discipline and presently teaches clinical electives for medical students and residents in family medicine. Contributing her expertise to many hospital groups, she was recently Chairman of a Planning Committee for "Family Practice Review and Update" and contributes to Continuing Medical Education (CME) for family medicine.

She is currently Head of the Department of Family Medicine at the Alberta Children's Hospital, Calgary. In 1992, Dr. Malm was the recipient of the YWCA Women of Distinction Award for the Advancement of Women.

# MARRECK, Heather L.



Calgary,  
Alberta

## ***Current Employment:***

Technical Leader, Judy Creek Operations,  
Imperial Oil Limited.

## ***Career:***

Manager – Natural Gas Supply, Acquisition  
Team Leader, Development Engineer and  
Project Engineer, Imperial Oil Limited, 1980  
to present.

## ***Education and Professional***

### ***Designations:***

P.Eng. M.B.A., University of Calgary, 1987.  
Bachelor of Applied Science, Civil  
Engineering, University of Windsor, 1980.

## ***Boards, Councils and***

### ***Associations:***

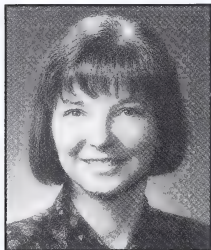
Past Co-Chair, Nova Committee, Canadian  
Petroleum Association.

## ***Contribution to Science:***

Heather L. Marreck has combined engineering expertise with a degree in business administration to forge a multi-discipline career. She has led several successful acquisition teams and project management assignments, including the development of oil reserves (Wembley, Mitsue and Spike), and the design of the Bonnie Glen Oil Battery. Past Co-Chair of the Canadian Petroleum Association Nova Committee, she was also Representative on the Nova Joint Industry Task Force and Facilities Liaison Committee. She is a Junior Achievement Business Advisor.



# MARTIN, Dianne



Calgary,  
Alberta

## ***Current Employment:***

Geophysical Processing Supervisor, Pulsonic Geophysical Ltd., 1993 to present.

## ***Career:***

3-D Processing Supervisor, 1991-92; Data Processor/Group Leader, 1984-91, Pulsonic Geophysical Ltd. Part-time Data Processor, Veritas, 1978-84; Seismic Data Processor, 1976-77. Seismic Data Processor, Geo-X, 1974-75. Seismic Data Processor, Digitech, 1972-74.

## ***Education and Professional***

### ***Designations:***

Diploma, Computer Technology, Southern Alberta Institute of Technology (SAIT), 1972.

## ***Contribution to Science:***

Dianne Martin is recognized professionally as a leader in seismic data processing, which is an integral part of oil and gas exploration. She is currently the supervisor of processing including 3-D processing at Pulsonic Geophysical Ltd. 3-D seismic processing is state of the art technology. Ms. Martin has experience in project management of all aspects of 2-D and 3-D projects and she has been instrumental in the development of new processing run-streams. She has several years' experience in processing numerous 3-D surveys, both land and marine, national and international.

# MARTIN, Dr. Renee H.



Calgary,  
Alberta

## ***Current Employment:***

Professor, Department of Pediatrics,  
University of Calgary, 1988 to present.  
Alberta Heritage Foundation for Medical  
Research (AHFMR) Scientist, 1989 to present.

## ***Career:***

Chair, Medical Genetics Research Group,  
University of Calgary, 1989-91. AHFMR  
Scholar, 1984-89. Associate Professor,  
Department of Pediatrics, University of  
Calgary, 1982-88. Assistant Professor,  
Department of Pediatrics, University of  
Calgary, 1978-82. Coordinator of Natural  
Sciences Department, Fraser Valley College,  
British Columbia, 1977-78. Biology  
Instructor, Fraser Valley College, 1975-77.

## ***Education and Professional***

### ***Designations:***

Ph.D., Medical Genetics, University of British  
Columbia, 1975. B.Sc. (Honours), Zoology,  
Summa Cum Laude, University of British  
Columbia, 1971.

## ***Boards, Councils and Associations:***

President, Canadian Fertility and Andrology  
Society (CFAS). Fellow, Canadian College  
of Medical Geneticists.

## ***Contribution to Science:***

Renee H. Martin is a researcher, educator,  
counsellor and administrator. A Heritage  
Medical Scientist, she is an international ex-  
pert on chromosomal abnormalities in sperm  
and her technique to study this subject is  
now used throughout the world. In studies  
of men with such abnormalities she is ident-  
ifying their risk of having mentally or  
physically disabled children. She teaches  
Genetics, a biology course in Human Genetics  
and participates in various types of commu-  
nity education. Once a week she holds a  
Genetics (Counselling) Clinic at the Alberta  
Children's Hospital. She has held a number  
of administrative positions such as Chair  
of the University of Calgary's Medical  
Genetics Research Group, and President of  
the Canadian Fertility and Andrology Society.  
Author of more than 160 papers, she has  
participated in many symposia on medical  
genetics.

# *MATHER, Dr. Jennifer A.* Lethbridge, Alberta

## ***Current Employment:***

Associate Professor, Department of Psychology, University of Lethbridge, 1985 to present.

## ***Career:***

University Research Fellow, Department of Psychology, University of Western Ontario, 1980–90. Assistant Professor, Department of Psychology, University of Western Ontario, 1980–85. Research Associate, Boston University Medical School, U.S.A., 1978–80. Research Associate, Brandeis University, U.S.A., 1978–80.

## ***Education and Professional Designations:***

Ph.D., Psychology, Brandeis University, 1978. M.Sc., Biology, Florida State University, U.S.A., 1972. B.Sc., Biology, Zoology, English, University of British Columbia, 1964.

## ***Boards, Councils and Associations:***

Member, Board of Directors, Alzheimer Society for Lethbridge and Area, 1987 to present.

## ***Contribution to Science:***

Jennifer Mather is a researcher in animal behaviour, spatial information processing and performance. As well, she has studied motor defects as markers of brain dysfunction (particularly in schizophrenia) and the socio-biology of cephalopods (octopuses). Publications and presentations cover topics such as eye movements, motor control and octopus behaviour. She has conducted field research in areas such as southern France, Vancouver Island, Bermuda, Nova Scotia and Hawaii. As a participant in several professional

societies, she has chaired committees such as Research – Alzheimer Society of Lethbridge, Faculty Travel and Human Subjects Research. Dr. Mather's interest in women's issues led her to form and become first Chair of the Gender Issues Committee at the University of Lethbridge. She is a participant in the "Minerva" program helping young women learn they can become scientists. Her dedication to the community is exemplified by her survey of caregivers, which was carried out for the Alzheimer Society. She is an avid birdwatcher and conducted two regional surveys for the Alberta Breeding Bird Atlas.

# MAYDELL, *Professor Ursula M.*



Edmonton,  
Alberta

## ***Current Employment:***

Associate Professor, Department of Computing Science, University of Alberta, 1972 to present.

## ***Career:***

Adjunct Professor, Telecommunications Research Laboratories, 1986-93. Associate Chair, Department of Computing Science, University of Alberta, 1988-91. Research Scientist, IBM Zurich Research Laboratory, Computer Network Group, Switzerland, 1985-86. Visiting Associate Professor, Digital Systems Laboratory, Stanford University, U.S.A., 1978. Visiting Professor, Institute for Informatics, University of Zurich, Switzerland, 1973-74. Assistant Professor, Department of Computing Science, University of Alberta, 1965-72. Consulting Statistician, Textile Fibres Department, DuPont of Canada, Ontario, 1964. Sessional Lecturer, Department of Mathematics, University of Alberta, 1963-65. Graduate Teaching Assistant, Department of Mathematics, University of Alberta, 1962-63. Program Analyst, Computing Center, University of Alberta, 1960-62. Systems Analyst, Saskatchewan Government Insurance Co., 1960. Data Center IBM, Ontario, 1958.

## ***Education and Professional***

### ***Designations:***

B.Sc. (Honours), Mathematics, University of Alberta, 1960. M.Sc., Mathematical Statistics, University of Alberta, 1963.

### ***Contribution to Science:***

Ursula M. Maydell, along with her Ph.D. students, has developed new methods and algorithms in telecommunications – new approaches which will make multi-media services more cost effective. The telecommunication methods are called Flexible Access Control and Self Traffic-Engineering. She has also undertaken the design of a system of networks servicing an entire hospital environment. Author of many publications, she often acts in a consulting capacity for groups such as IBM, Alberta Government Telephones, and other University departments. Active in Women in Scholarship, Engineering, Science and Technology (WISEST), she is also a participant in other groups which encourage women in science.



# McBAIN, Colleen J.



Calgary,  
Alberta

## ***Current Employment:***

Marketing Manager – Planning, Gas Supply,  
Customer Service – AEC Oil and Gas Com-  
pany, 1993 to present.

## ***Career:***

Reservoir Engineering Manager, AEC Oil  
and Gas Company, 1988-93. Engineering  
Manager, Chief Reservoir Engineer, Maxus  
Energy Canada Ltd., 1983-88. Engineering  
Supervisor, Senior Engineer, Heavy Oil  
Department, Husky Oil Operations, 1980-83.  
Petroleum Engineer, PanCanadian Petroleum  
Limited, 1976-80.

## ***Education and Professional***

### ***Designations:***

P.Eng. Executive Development Program,  
Faculty of Management, University of  
Calgary, 1990. Bachelor of Applied Science,  
Chemical Engineering, Queen's University,  
Ontario, 1976.

## ***Boards, Councils and***

### ***Associations:***

Chair, 1993 United Way Campaign, Alberta  
Energy Company Ltd. International Reser-  
ves Committee, Society of Petroleum  
Engineers (SPE).

## ***Contribution to Science:***

Colleen J. McBain, with the skillful  
application of scientific knowledge, sound  
business judgement and engineering princi-  
ples, has assisted in the discovery and  
maximized the economic recovery of oil  
and gas reserves in Western Canada. As  
an active member of several professional  
groups, she has served on the International  
Reserves Committee of the Society of  
Petroleum Engineers and has co-chaired  
sessions at the Annual Canadian Institute  
of Mining, Metallurgy and Petroleum  
(CIM) Technical Conference. She actively  
participates in information sessions at  
Calgary high schools to promote careers  
in engineering.

# *McCORMACK, Laura G.*



Calgary,  
Alberta

## ***Current Employment:***

Senior Reservoir Engineer, Gulf Canada Resources Limited, 1985 to present.

## ***Career:***

Reservoir Engineer, 1982-84; Process Engineer, 1979-82; Joint Venture Engineer, 1977-79, Gulf Canada Resources Limited.

## ***Education and Professional***

### ***Designations:***

P.Eng. B.Sc., Chemical Engineering, University of Calgary, 1977.

## ***Boards, Councils and***

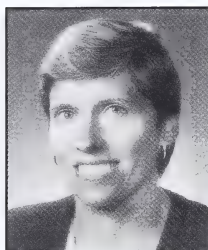
### ***Associations:***

Council member, Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA). Treasurer, Sundial Toastmasters Club.

## ***Contribution to Science:***

Laura G. McCormack is a Senior Reservoir Engineer who has been responsible for enhanced oil recovery, shallow gas and waterflood reserves assessment, infill drilling proposals as well as budgeting and production forecasting. A tireless worker for her professional groups, she received the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA) Volunteer Service Award in recognition of her participation on committees for a minimum 6 year aggregate equivalent. Of recent import is the fulfillment of a 3 year term on APEGGA Council. Her contributions to science at large are numerous. She is a volunteer for "Operation Minerva", showing junior high school girls how interesting a hands on job in engineering can be, and has also judged the Science Alberta essay contest for junior high students.

# MCDONALD, Marolyn S.



Calgary,  
Alberta

## ***Current Employment:***

Manager, Development Services, Imperial Oil Limited, 1991 to present.

## ***Career:***

Capability Development Manager, Information Management, 1990-91; Application Manager, Exploration, 1988-89; Section Head, Production Operation Systems, 1986-88; Systems Manager, Systems Technology, 1982-85; Coordinator, Minerals, Exploration and Land Systems, 1980-82; Leader, Heavy Oil Financial Systems, 1979-80, Imperial Oil Limited. Application Manager, Corporate Systems, General Foods Ltd., 1973-79.

## ***Education and Professional***

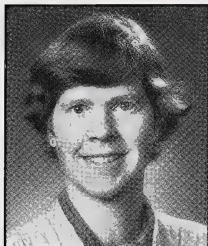
### ***Designations:***

M.B.A., University of Toronto, 1978. B.Sc., Mathematics, Ohio University, U.S.A., Summa Cum Laude, 1971.

## ***Contribution to Science:***

Marolyn S. McDonald is responsible for the systems side of an annual Strategic Information Plan which delivers an integrated information source to her company. Her assignments in exploration, production, minerals, land, and heavy oil have resulted in improved application of systems technology including more sophisticated exploration mapping, integration of data and reduced costs through hardware and software upgrades. In her career, she has focused on leadership, with special emphasis on coaching more junior female employees. She has established Women's Focus Groups to identify and resolve work-related issues in the Systems and Exploration Departments, and is a certified course instructor for 'Managing Personal Growth.' As past coordinator of Junior High School Career Day, she encourages girls to stay in the sciences.

# McMECHAN, Dr. Margaret (Margot)



Calgary,  
Alberta

## ***Current Employment:***

Research Scientist, Geological Survey of Canada, 1980 to present.

## ***Career:***

Contract geologist, British Columbia Ministry of Energy, Mines and Petroleum Resources, 1975-76.

## ***Education and Professional Designations:***

P. Geol. Ph.D., Geological Sciences, Queen's University, 1980. B.Sc. (Honours), Geological Sciences, University of British Columbia, 1975.

## ***Contribution to Science:***

Margot McMechan, an earth scientist, is recognized internationally as an expert on mountain chains and their development. She has evolved models and concepts

describing the development of the Canadian Rocky Mountains which have been applied to other mountain belts in the world.

Through field studies she has constructed geological maps, 17 of which portray the history and evolution of this region. Active in her profession, Dr. McMechan has 33 publications to her credit and several awards. She has served on the executive of the Geological Association of Canada and as a member of the National Earth Sciences Advisory Council for the Banff Conference. She is a representative on the Department of Energy, Mines and Resources Committee on Women's Issues and has coordinated a Women's Network at the Calgary office of the Geological Survey of Canada. A regular volunteer on the Science Hotline, she also brings her science to the schools, describing the career of a field geologist to students.



# *MICHENER, Dr. Gail R.*



Lethbridge,  
Alberta

## ***Current Employment:***

Professor, Department of Biological Sciences,  
University of Lethbridge, 1990 to present.

## ***Career:***

Natural Sciences and Engineering Research Council (NSERC) University Research Fellow and Associate Professor, Department of Biological Sciences, University of Lethbridge, 1985-90. NSERC University Research Fellow and Visiting Professor, Department of Biological Sciences, University of Lethbridge, 1981-85. Visiting Assistant Professor, Department of Biology, University of Colorado, U.S.A., 1980. Research Associate and Sessional Lecturer, Department of Biological Sciences, University of Lethbridge, 1978-80. Isaac Walton Killam Memorial Postdoctoral Fellow, Department of Zoology, University of Alberta, 1974-77. Sessional Lecturer, Department of Zoology, University of Alberta, 1974-76. Lecturer, Department of Zoology, University of Cape Coast, Ghana, West Africa, 1972-74. Research Assistant, Animal Physiology, Waite Agricultural Research Institute, South Australia, 1967.

## ***Education and Professional Designations:***

Ph.D., Biology, University of Saskatchewan, 1972. B.Sc. (Honours), Zoology, University of Adelaide, South Australia, 1967. B.Sc., Zoology and Genetics, University of Adelaide, 1966.

## ***Boards, Councils and Associations:***

President, Animal Behavior Society, 1992-93.  
President, Canadian Council on Animal Care, 1988-89.

## ***Contribution to Science:***

Gail R. Michener, biological scientist, has numerous publications to her credit on topics such as social organization, population dynamics and reproductive biology of Richardson's ground squirrels; nest site selection of black billed magpies; and ethical issues in the use of wild animals in behavioral and ecological studies. She received the Wildlife Society Award for Best Editorship for "The Biology of Ground Dwelling Squirrels." Active in many professional groups, she has been invited to speak at workshops and symposia. She has been the recipient of several scholarships, including a Killam Postdoctoral Fellowship and an NSERC University Research Fellowship.

# *MIEDZINSKI, Dr. Lilly J.*



Edmonton,  
Alberta

## ***Current Employment:***

Associate Professor, Department of Medicine, with Cross Appointment to Department of Medical Microbiology and Infectious Diseases, University of Alberta, 1987 to present. Divisional Director, Division of Infectious Diseases, Department of Medicine, University of Alberta, 1988 to present.

## ***Career:***

Co-founder and Co-Director, Municipal HIV Outpatient Program, 1988-90. Acting Divisional Director, Division of Infectious Diseases, University of Alberta, 1987-88. Assistant Professor, Department of Medicine, University of Alberta, 1982-87.

## ***Education and Professional***

### ***Designations:***

Fellow, Infectious Diseases, University of Alberta, 1980-82. F.R.C.P.(C), Internal Medicine, 1981. Internal Medicine Residency, University of Alberta, 1977-81. Rotating Internship, Ottawa Civic Hospital, Ottawa, 1976-77. M.D., University of Alberta, 1976. B.A. (Honours Psychology), University of Alberta, 1972.

## ***Boards, Councils and Associations:***

Councillor, Canadian Infectious Disease Society, 1991-93.

## ***Contribution to Science:***

Lilly J. Miedzinski, a practising clinician and specialist in infectious diseases, is presently studying those who are immune compromised, such as AIDS patients. Active in the professional community, among other positions she is Chair of the AIDS Advisory and Policy Committee at the University of Alberta Hospitals and Honourary Consultant to the Edmonton Board of Health. Author of several publications, she is invited to speak on topics such as infections, antibiotics, drug therapy and AIDS. At the national and provincial levels, she has served on several advisory boards, including the Provincial Advisory Committee on AIDS.

# MOTTERSHEAD, Kathleen



Cochrane,  
Alberta

## ***Current Employment:***

Systems Analyst, Geological Survey of Canada, 1982 to present.

## ***Career:***

Systems Analyst, PanCanadian Petroleum Limited, Calgary, 1979-82. Research Assistant, Department of Physics, University of Alberta, Edmonton, 1977-79. Programmer Analyst, Telesat Canada, 1974-77. Physics Instructor, Guelph University, Guelph, Ontario, 1973-74.

## ***Education and Professional***

### ***Designations:***

M.Sc., Experimental Space Science, York University, Ontario, 1973. B.Sc. (Honours), Physics, Trent University, Ontario, 1971.

## ***Boards, Councils and***

### ***Associations:***

Chair, Scientists in the Schools Committee, Calgary Science Network, 1991-92.

## ***Contribution to Science:***

Kathleen Mottershead, graduate in experimental space science, played a role in developing software to control the Anik satellites. She is presently responsible for geological data base design and development.

As first coordinator of the "Science in the Schools" program, she established a prototype that eventually led to the development of the Science Hotline in Calgary, one that has become a provincial and national model. As chair of a Calgary Science Network Committee, she served as liaison between educational, professional and industrial representation to develop a Science Hotline. She is the originator of this successful communication device which brings scientists and engineers into the classroom.

# MURPHY, Maureen C.



Okotoks,  
Alberta

## ***Current Employment:***

Senior Partner, Murphy and Associates, 1992 to present.

## ***Career:***

Senior/Staff Analyst, Shell Canada Limited, 1984-92. Senior Geologist/Supervisor, Crows Nest Resources Limited, 1981-84. Manager, Summas Resource Evaluation Limited, 1979-81. Senior Geologist, Western Canada Coal Resource Data Base (University of Alberta), 1977-79. Consulting Geologist, Exploration and Mineral Property Evaluation, 1973-77.

## ***Education and Professional Designations:***

ISP, P.Geol. Post Graduate Study, Geology, Mineral Engineering and Civil Engineering. Management Development Certificate, University of Calgary, 1983. B.Sc., Geology (Mineralogy, Geophysics and Studies in Mining Engineering and Rock Mechanics), University of Alberta, 1968.

## ***Boards, Councils and Associations:***

Chair, Education Coordinating Committee; Member, Discipline Committee; Council Member, Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA).

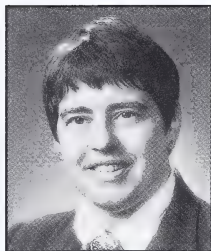
## ***Contribution to Science:***

Maureen C. Murphy has a varied career with professional accomplishments in many areas.

As a geologist she has experience in exploration and development, particularly in coal mine projects and has conducted advanced research in mineralogy, petrology, geochronology, volcanology and palaeomagnetism. Her expertise in information systems has led to the development and administration of models and programs with practical applications. She has also developed strategic business models to identify the future direction and key objectives for major business units. As an involved professional she has donated time and knowledge to APEGGA committees and to its Council, receiving their Voluntary Service Award in 1990.



# *NEWBERT, Judy D.*



Crossfield,  
Alberta

## ***Current Employment:***

President, Newbert Petroleum Engineering Ltd., 1989 to present.

## ***Career:***

Senior Reservoir Engineer, Westmin Resources, 1980-89. Enhanced Recovery Engineer, Gulf Canada Resources Limited, 1979-80. Reservoir Engineer, Home Oil, 1974-79. Design Engineer, Field Aviation, 1971-74.

## ***Education and Professional***

### ***Designations:***

P.Eng. B.Sc., Mechanical Engineering, University of Alberta, 1971. B.Sc., Physics, University of Alberta, 1970.

## ***Boards, Councils and Associations:***

Member, Board of Directors, Petroleum Society of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM). Past Board Member, Calgary Branch, CIM. Past Board Member, Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA).

## ***Contribution to Science:***

Judy D. Newbert has steadily advanced in the petroleum industry having accomplished several innovations in production, heavy oil completions and liquid allocations programs. As a participant in a Calgary school visitation program she explains engineering to classes, serving as a role model for female students.

# *NIELSEN, Valerie A.A.*



Calgary,  
Alberta

## ***Current Employment:***

Valerie A.A. Nielsen Oil and Gas Consultant,  
1983 to present.

## ***Career:***

Project Manager, Beaufort Sea and Senior  
Business Planner, Gulf Canada Resources  
Limited, Calgary, 1977-83. Senior  
Geophysicist, Mobil Oil, 1974-77.  
Geophysicist, Chevron Standard, 1968-74.  
Geophysicist, Western Geophysical, London,  
U.K., 1967-68. Scientist, National Institute  
of Oceanography, London, U.K., 1967.  
Geophysicist, Ray Geophysical, Calgary, 1966.

## ***Education and Professional***

### ***Designations:***

P.Geoph. B.Sc. (First Class Honours) (Major  
Mathematics), Dalhousie University, Nova  
Scotia, 1966.

## ***Boards, Councils and Associations:***

President, Calgary Chamber of Commerce.  
Executive Council Member, Association of  
Professional Engineers, Geologists and  
Geophysicists of Alberta (APEGGA). Director,  
Bank of Canada. Director, Alberta Energy  
Company. Past President, Canadian Society  
of Exploration Geophysicists.

## ***Contribution to Science:***

Valerie A.A. Nielsen is an oil and gas  
consultant with varied experience as senior  
geophysicist, scientist with the National  
Institute of Oceanography (London, England),  
project manager for the Beaufort Sea and  
senior business planner. Winner of several  
awards, she has been honoured by the  
Canadian Society of Exploration  
Geophysicists and the Calgary Chamber of  
Commerce, having served in an executive  
capacity with both organizations. Present  
positions include membership in a Federal  
advisory group which provides advice  
regarding bilateral trade negotiations with  
the United States.

# PARENTEAU, Connie G.



St. Albert,  
Alberta

## ***Current Employment:***

Manager, Planning and Administration,  
Network Engineering, AGT Limited, 1993  
to present.

## ***Career:***

Planning Engineer, Fundamental Planning,  
1990-93; Senior Engineer, Operational Systems  
Planning, 1988-90; Senior Engineer, Planning  
Engineering Costs, 1986-88; Senior Engineer,  
Maintenance – Transmission, 1984-85;  
Engineer I and Engineer-in-Training, 1980-84,  
AGT Limited. Research Assistant, Faculty of  
Engineering, University of Alberta, 1979.  
Survey Aid, Alberta Transportation, Govern-  
ment of Alberta, 1978.

## ***Education and Professional***

### ***Designations:***

P.Eng. B.Sc., Electrical Engineering,  
University of Alberta, 1980.

## ***Boards, Councils and***

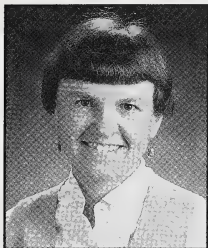
### ***Associations:***

President, Association of Women in Engineer-  
ing and Science, Edmonton Chapter, 1990-92.

## ***Contribution to Science:***

Connie G. Parenteau, Planning Engineer,  
has experience in fundamental, operational  
and engineering cost planning. She has  
expertise in computers, telecommunications  
and microprocessors. Well known for her  
organizational work in raising the profile of  
female engineers, she is Past President of the  
Association of Women in Engineering and  
Science and a participant in the Women in  
Scholarship, Engineering, Science and Tech-  
nology (WISEST) High School Career Work-  
shop. She is also a role model for the Step-  
ping Stones program and this year's recipient  
of the Association of Professional Engineers,  
Geologists and Geophysicists of Alberta  
(APEGGA) Early Accomplishment Award.

# PASZKOWSKI, Dr. Cynthia A.



Edmonton,  
Alberta

## ***Current Employment:***

Associate Professor, Department of Zoology,  
University of Alberta, 1991 to present.

## ***Career:***

Research Associate, Institute of Limnology,  
University of Lund, Sweden, 1990-91. Visiting  
Scientist, Department of Biology, University of  
Joensuu, Finland, summers, 1985-87. Sessional  
Lecturer, Department of Zoology, University of  
Alberta, 1984-90. Research Associate, College  
of Oceanography, Oregon State University,  
U.S.A., 1983-84 and summer, 1985. Graduate  
Teaching Assistant, Department of Zoology,  
University of Wisconsin-Madison, U.S.A.,  
1974-79.

## ***Education and Professional***

### ***Designations:***

Ph.D., Zoology, University of  
Wisconsin-Madison, 1984. M.S., Zoology,  
University of Wisconsin-Madison, 1980. A.B.,  
Biology, Albion College, Michigan, U.S.A., 1973.

## ***Contribution to Science:***

Cynthia A. Paszkowski has achieved significant results on the foraging behavior of fishes and birds, as well as how feeding patterns affect population level interactions and community structure. With many professional accomplishments to her credit, she has reviewed journal articles and has served on committees for the American Ornithological Union, American Fisheries Society and the Ecological Society of America. As a university instructor she has helped educate and advise a number of outstanding students; and as an ecological researcher she has worked in the United States, Finland, Sweden and Alberta. One current research project examines the endangered Northern Leopard Frog and another concerns aquatic birds nesting on lakes in the boreal woodland. Dr. Paszkowski feels that this type of research will become increasingly important in preserving Alberta's natural heritage.



# PAYNE, Alice V.



Calgary,  
Alberta

## ***Current Employment:***

Senior Geologist, Gulf Canada Resources Limited, 1991 to present.

## ***Career:***

Senior Business Planner – Exploration Strategy Group, 1988-91; Supervisor, Development Geology, 1983-88; Senior Geologist, 1978-79, Gulf Canada Resources Limited. Consultant, 1978-79. Research Associate, Department of Geology, University of Alberta and Carleton University, Ontario, 1966-78. Scientific Officer, Geological Survey of Canada, Ontario, 1962-63.

## ***Education and Professional***

### ***Designations:***

P.Geol. M.Sc., Geology, University of Alberta, 1965. B.Sc. (Honours), Geology, University of Alberta, 1962.

## ***Boards, Councils and***

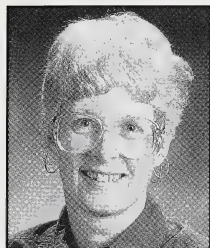
### ***Associations:***

Member, Premier's Council on Science and Technology, Alberta. Past President, Canadian Society of Petroleum Geologists (CSPG). Past Chairman and Director, Alberta Science and Technology Leadership Awards Foundation. Past President, Cambrian Heights Community Association, Calgary.

## ***Contribution to Science:***

Alice V. Payne, geoscientist, has a wide background encompassing research, consulting, teaching and management. She has co-authored several publications on varied topics such as continental drift, potassium-argon dating and resource estimation worldwide. Business experience included treasurer and director duties with Ryan Gold Mines Limited. First woman president of the Canadian Society of Petroleum Geologists, she was also the first chair of the Alberta Science and Technology Leadership Awards Foundation. Active in many professional groups, she also brings her enthusiasm to the community through "Stepping Stones" and other programs. Through her community activities and her professional exchanges, she has shown that science is fun and meaningful. She is a member of the Premier's Council on Science and Technology and she is on the Women in Science Chair Committee at Mount Royal College.

# PILARSKI, Dr. Linda M.



Edmonton,  
Alberta

## ***Current Employment:***

Professor, Department of Immunology,  
University of Alberta, 1986 to present.

## ***Career:***

Associate Professor, Department of Immunology, University of Alberta, 1979-86. Assistant Professor, Department of Immunology, University of Alberta, 1975-79. Senior Scientific Officer, Walter and Eliza Hall Institute, Royal Melbourne Hospital, Australia, 1975. Postdoctoral Fellow, Department of Microbiology, John Curtin School of Medical Research, Australian National University, 1973-75. Full-time Demonstrator, Department of Biochemistry, University of Adelaide, Australia, 1972, 1965-68. Scientific Officer, Argonne National Laboratory, U.S.A., 1963-65.

## ***Education and Professional Designations:***

Ph.D., Biochemistry, University of Adelaide, 1973. Graduate Courses, Departments of Bacteriology, Biochemistry and Genetics, University of Wisconsin, U.S.A., 1965-66. Graduate Courses, Department of Biochemistry, Illinois Institute of Technology, U.S.A., 1963-65. B.A., (High Honour) Elmhurst

College, Illinois, 1963. (Sophomore Honours), University of Wisconsin, 1961.

## ***Boards, Councils and Associations:***

Vice President, Canadian Society of Immunology.

## ***Contribution to Science:***

Linda M. Pilarski is known internationally for her work on disease progression and immunodeficiency in cancer patients, immunoregulation, normal immune development and T cell development in the human thymus. Invited to speak at many international symposia, she is also reviewer for a number of international journals and an associate editor for the Journal of Immunology. As a member of Women in Scholarship, Engineering, Science and Technology (WISEST), she works each summer with grade 11 and 12 students in her laboratory at the Department of Immunology in order for them to gain laboratory experience and receive exposure to science. She has served on scientific grant review panels and committees for the National Cancer Institute of Canada, Medical Research Council of Canada, Alberta Heritage Foundation for Medical Research, Leukemia Research Fund, and the National Institute of Health, U.S.A.

# *PIPER, Dr. Martha C.*



Edmonton,  
Alberta

## ***Current Employment:***

Vice-President (Research), University of Alberta, Faculty of Rehabilitation Medicine, University of Alberta, 1993 to present.

## ***Career:***

Dean, Professor, Faculty of Rehabilitation Medicine, 1988-92; Dean, Associate Professor, Faculty of Rehabilitation Medicine, University of Alberta, 1985-88. Director, Associate Professor, School of Physical and Occupational Therapy, McGill University, Quebec, 1980-85; Assistant and Associate Professor, Department of Epidemiology and Biostatistics, McGill University, 1979-85. Director, Assistant Professor, School of Physical and Occupational Therapy, McGill University, 1979-80. Physical Therapist, Montreal Association for the Mentally Retarded, 1975-76. Physical Therapist, Hospital Sainte-Justine, Quebec, 1975. Director, Child Care Centre, Sir George Williams University, 1973-75. Chief Physical Therapist, Georgetown University Hospital, Washington, D.C., U.S.A., 1972-73. Senior Physical Therapist, Prince George's County Health Department, U.S.A., 1970-72. Instructor, School of Physical Therapy, University of Connecticut, U.S.A., 1969-70. Physical Therapist,

Windham Community Memorial Hospital, U.S.A., 1968-69. Physical Therapist, Hartford Hospital, U.S.A., 1967-68.

## ***Education and Professional Designations:***

Ph.D., Epidemiology and Health, McGill University, 1979. M.A., Child Development, University of Connecticut, 1970. B.Sc., Physical Therapy, University of Michigan, U.S.A., 1967.

## ***Boards, Councils and Associations:***

Fellow, American Academy for Cerebral Palsy and Developmental Medicine. Board Member, Alberta Research Council.

## ***Contribution to Science:***

Martha C. Piper focuses her research on development of the central nervous system in premature babies and how these babies learn to move. She and her team of researchers have developed a new infant motor maturation scale which assists in measuring the level of early motor development. Early assessment and diagnosis means that treatment can begin immediately, with the hope of minimizing disabilities. It is through Dr. Piper's leadership that the Faculty of Rehabilitation Medicine has attained international recognition for its outstanding educational and research programs.

# PREIKSAITIS, Dr. Jutta K.



Edmonton,  
Alberta

## ***Current Employment:***

Associate Professor, Division of Infectious Diseases, Faculty of Medicine, University of Alberta, 1989 to present. Clinical Virologist, Provincial Laboratory of Public Health for Northern Alberta, 1991 to present. Consultant, Canadian Red Cross Society Blood Transfusion Service, 1984 to present. Alberta Heritage Foundation for Medical Research (AHFMR) Scholar, 1983 to present.

## ***Career:***

Consultant, Provincial Laboratory of Public Health for Northern Alberta (Diagnostic Virology), 1988-92. Assistant Professor, Division of Infectious Diseases, Faculty of Medicine, University of Alberta, 1983-89 [cross appointment to Department of Medical Microbiology and Infectious Diseases]. Centennial Fellowship, Medical Research Council of Canada, Division of Infectious Diseases, Department of Medicine, Stanford University, U.S.A., 1980-82. Research Fellow, Medical Research Council of Canada, Division of Infectious Diseases, Department of Medicine, University of Alberta, 1979-80. Research Fellow, Medical Research Council of Canada, Division of Infectious Diseases, Department of Medicine, University of Manitoba, 1978-79.

## ***Education and Professional Designations:***

F.R.C.P (C) (Internal Medicine), 1983. M.D., McMaster University, Ontario, 1976. B.Sc., Medicine, McMaster University, 1974.

## ***Boards, Councils and***

## ***Associations:***

Member, Scientific Advisory Committee, Canadian Blood Agency, 1992 to present. Member, Grants Committee, Immunology and Microbiology, National Health Research and Development Program, Health and Welfare Canada, 1987 to present. Member, Alberta Advisory Committee on Communicable Disease Control, 1987-90. Member, Provincial Advisory Committee on AIDS, 1986-88. Member, Canadian Red Cross Society Blood Transfusion Service Working Group on Immunology and Transmissible Diseases, 1986-88. Councillor, American Federation for Clinical Research (Western Section), 1984-87.

## ***Contribution to Science:***

Jutta K. Preiksaitis is a Heritage Medical Scholar, who researches common viruses which cause serious complications or death in patients who have blood transfusions or organ transplants. She has identified groups of patients who are at high risk of infectious complications, so that immunodepressant drugs can be adjusted to minimize illness in these patients. Supervisor of research trainees, she is also responsible for establishing and maintaining the bacteriologic and virologic monitoring system for renal/cardiac/liver transplant recipients.



# PREPAS, Dr. Ellie E.



Edmonton,  
Alberta

## ***Current Employment:***

Professor, Department of Zoology (Limnology), University of Alberta, 1990 to present. Director, Environmental and Research Studies Centre, University of Alberta, 1991 to present. Adjunct Professor, Boreal Institute for Northern Studies, Canadian Circumpolar Institute, 1989 to present. Director, Meanook Biological Research Station, University of Alberta, 1986 to present.

## ***Career:***

Acting Director, Environmental and Research Studies Centre, University of Alberta, 1990-91. Associate Professor, Department of Zoology, 1985-90. Co-director, Meanook Biological Research Station, University of Alberta, 1983-86. Assistant Professor (Limnology), Department of Zoology, University of Alberta, 1979-85. Lecturer, McGill University, 1977.

## ***Education and Professional***

### ***Designations:***

Ph.D., University of Toronto, 1980. M.Env., York University, 1974. B.Math, University of Waterloo, 1971.

## ***Boards, Councils and Associations:***

Board of Directors, Alberta Lake Management Society. Board of Directors, North American Lake Management Society.

## ***Contribution to Science:***

Ellie E. Prepas is recognized for her research on eutrophic systems and on understanding the factors which control lake and river productivity. She has studied the incidence of natural blue-green or cyanobacterial toxins in eutrophic lakes and the impact of these toxins on the aquatic food chain and on human health. Her studies emphasize the need for developing new and affordable technology to control internal phosphorous loading in eutrophic hardwater lakes on the Canadian prairies. Dr. Prepas has authored many publications and has membership in several societies concerned with lake management, limnology, water pollution and oceanography. She is involved with Women in Scholarship, Engineering, Science and Technology (WISEST) and initiated safety seminars on aquatic biology and chemistry in her department.

# PURDY, Diana E.



Edmonton,  
Alberta

## ***Current Employment:***

Director, Mineral Access and Mapping,  
Mineral Resources Division, Alberta Department of Energy, Government of Alberta,  
1990 to present.

## ***Career:***

Manager, Geology, Mineral Resources  
Division, Alberta Department of Energy,  
Government of Alberta, 1987-90. Geologist,  
private sector, and Geologist, Mineral  
Resources Division, Alberta Department  
of Energy, 1971-87.

## ***Education and Professional***

### ***Designations:***

P.Geol. M.B.A., Finance and Economics,  
University of Alberta, 1986. B.Ed., Element-  
ary Science, University of Alberta, 1979.  
B.Sc., Geology, McGill University, 1971.

## ***Boards, Councils and***

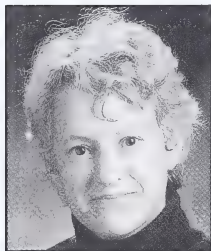
### ***Associations:***

Fellow, Geological Association of Canada.  
Member, Career Counselling Committee,  
Association of Professional Engineers,  
Geologists and Geophysicists of Alberta  
(APEGGA). Former President and Treasurer,  
Edmonton Geological Society.

## ***Contribution to Science:***

Diana E. Purdy is a public sector manager,  
who has made contributions toward sustain-  
able energy and resource development.  
She is responsible for policy formulation  
and implementation of environmental issues  
affecting the oil and gas sector. She heads  
a team of professionals who provide expert  
technical advice to the Department of Energy.  
Past executive member of the Edmonton  
Geological Society and Fellow of the Geolo-  
gical Association of Canada, she is also active  
in several other professional groups. Through  
her involvement with APEGGA and its Career  
Counselling Committee she engenders science  
pursuits in young students, providing an  
understanding of the role geology and resour-  
ces play in their daily lives.

# REHA-KRANTZ, Dr. Linda



Calgary,  
Alberta

## ***Current Employment:***

Associate Professor, Department of Genetics,  
University of Alberta, 1987 to present.  
Alberta Heritage Foundation for Medical  
Research Scholar, 1981 to present.

## ***Career:***

Visiting Associate Professor, Department  
of Molecular Biophysics & Biochemistry,  
Yale University, U.S.A., 1989-90. Assistant  
Professor, Department of Genetics, University  
of Alberta, 1981-87. Visiting Assistant  
Professor, Department of Genetics, University  
of Alberta, 1980.

## ***Education and Professional Designations:***

DNA Sequencing Course, Bethesda Research  
Laboratories, Inc., 1983. Advanced Bacterial  
Genetics, Cold Spring Harbor Laboratory,  
U.S.A., 1981. Ph.D., Biology, Johns Hopkins  
University, U.S.A., 1975. B.Sc., Molecular  
Biology and Chemistry, University  
of Washington, U.S.A., 1971.

## ***Contribution to Science:***

Linda Reha-Krantz is an Alberta Heritage  
Scholar whose research uses genetic and bio-  
chemical methods to determine the molecular  
mechanisms of DNA replication, the under-  
standing of which is relevant to discovering  
the genesis of cancer. Dr. Reha-Krantz has  
authored many publications and has been  
invited to make presentations at several uni-  
versities including, Johns Hopkins, Yale,  
University of Massachusetts and the University  
of Southern California, as well as other insti-  
tutions. She was a Visiting Associate Professor  
at Yale University. While very involved  
in the professional community, she also finds  
time to supervise high school students with  
the summer Women in Scholarship, Engineer-  
ing, Science and Technology (WISEST)  
program.

# *RIMELL, Drude*



Calgary,  
Alberta

## ***Current Employment:***

Director, Computer Services Department,  
Alberta Energy Company Ltd., 1991 to present.

## ***Career:***

Manager, Application Systems, Alberta Energy  
Company Ltd., 1988-91. Manager, Data  
Management and Applications, 1986-88;  
Manager, Production and Technical Systems,  
Research Support Services, 1980-85; Manager,  
Downstream Systems, 1980-85; Systems  
Supervisor, 1977-80, Petro-Canada Inc.

## ***Education and Professional***

### ***Designations:***

Executive Development Program, University  
of Calgary, 1985. Graduate Studies, Advanced  
Numerical Analysis/Computing Science, Uni-  
versity of Calgary, 1967-68. B.Sc. (Honours),  
Economics, London School of Economics and  
Political Science, England, U.K., 1966. General  
Certificate of Education – Advanced Level,

St. Clare's College, England, U.K., 1963.  
Certificat d'Etudes Francaises, Universite  
de Grenoble, France, 1962.

## ***Boards, Councils and Associations:***

Member, Advisory Committee on Exe-  
cutive Management for Women, University  
of Calgary, Faculty of Management.

## ***Contribution to Science:***

Drude Rimell is an expert in the application  
of computer systems to the oil and gas  
industry in Western Canada. She specializes  
in integrating systems and data architectures,  
using network based technology for efficient  
and flexible information access and analysis.  
Having lived and travelled extensively abroad  
she has consulted internationally to oil  
companies and governments in South  
America and the Far East.



# *RUSSELL, Dr. Margaret L.* Calgary, Alberta

## ***Current Employment:***

Assistant Professor, Departments of Community Health Sciences and Surgery, Faculty of Medicine, University of Calgary, 1989 to present. Consultant Medical Officer of Health, Big Country and Drumheller Health Units, 1989 to present. Medical Staff, Foothills Hospital, 1981 to present.

## ***Education and Professional***

### ***Designations:***

Ph.D., University of Calgary, 1989. FRCP(C), University of Calgary, 1987. Fellowship, Alberta Heritage Foundation for Medical Research, 1985-89. Pre-doctoral Fellow, (Medical Sciences Program, Epidemiology), Department of Community Health Sciences, Faculty of Medicine, University of Calgary, 1983-89. Community Medicine Fellow, Department of Community Health Sciences, Faculty of Medicine, University of Calgary, 1983-87. Certificate, New England Epidemiology Institute, University of Massachusetts, U.S.A., 1982. CFP, University of Calgary, 1978. Foothills Provincial General Hospital, University of Calgary, 1976-78. M.D., University of Calgary, 1976. B.Sc., University of Calgary, 1973.

## ***Boards, Councils and***

### ***Associations:***

Secretary Treasurer, Canadian Association of Teachers of Social and Preventive Medicine, 1989-91. Member at Large (Executive), Canadian Association of Social and Preventive Medicine, 1987-89. Chair, Core Committee on Occupational and Environmental Health, Alberta Public Health Association, 1985-86. Certification Examiner, College of Family Physicians of Canada, 1981-85.

## ***Contribution to Science:***

Margaret L. Russell maintains an active research load while carrying on teaching duties. Some research topics have included gallstone disease, anti-malarial drugs and epidemiology. She is also consultant medical officer of health to two rural health units and is Director of the International Travel Clinic. Other outreach activities include Continuing Education lectures/workshops and media information concerning travel and health.

# SHAO, Diane R.



Calgary,  
Alberta

## ***Current Employment:***

Geophysicist, Talisman Energy Inc., 1993 to present.

## ***Career:***

Geophysical Advisor, Encor Inc., 1987-93.

Geophysicist, Dome Petroleum, 1983-87.

Placements through university "co-op" program in the following positions: Geophysicist, Dome Petroleum and Amoco Canada in 1981 and 1982; Research Assistant, TRIUMF - B.C. Cancer Research Laboratory, 1981; Research Assistant, B.C. Hydro Research, 1980; Research Assistant, Xerox, 1979.

## ***Education and Professional***

### ***Designations:***

P.Geoph. M.B.A., University of Calgary, 1993. Business Administration Certificate (Honours), Southern Alberta Institute of Technology (SAIT), 1987. B.Sc. (Honours), University of Victoria, 1983.

## ***Boards, Councils and Associations:***

Director, Banbury Crossroads Private School, 1984-92.

## ***Contribution to Science:***

Diane R. Shao is a geophysicist whose career has many facets. To increase the success in drilling, she uses a wide variety of computer technology to interpret both 2 and 3-dimensional seismic data. In her past positions, she familiarized management with the role of geophysics, provided input to geophysical software manufacturers, supervised staff and coordinated budgets. Her computer and research skills combined with her understanding of business issues have been invaluable in her chosen field.

# *SHAW, Dr. Mildred L.G.*



Calgary,  
Alberta

## ***Current Employment:***

Professor, Department of Computer Science,  
University of Calgary, 1986 to present.

## ***Career:***

Adjunct Professor, Department of Computer  
Science, University of Calgary, 1985-86.  
Professor, Department of Computer Science  
and Associate Dean, Faculty of Education,  
York University, Ontario, 1984-86. Associate  
Professor, Department of Computer Science,  
York University, 1982-84. Honourary  
Research Psychologist, Guy's Hospital Medical  
School, 1980-82. Senior Lecturer, Middlesex  
Polytechnic, London, U.K., 1972-82. Teacher,  
Comprehensive School, London Borough of  
Waltham Forest, 1966-71.

## ***Education and Professional Designations:***

Chartered Psychologist, U.K., 1988. Ph.D.,  
Brunel University, U.K., 1978. Diploma in  
Education, University of London, U.K., 1975.  
M.Sc., Computer Science, University of  
London Institute of Computer Science, 1972.  
B.Sc., Mathematical Sciences, Upper Second,  
Birkbeck College, University of London, 1971.  
Diploma, Teaching of Mathematics and  
Advanced Statistics, Mathematical Association,

U.K., 1967. Teachers Certificate with  
Distinction, Southlands College, University  
of London, 1966.

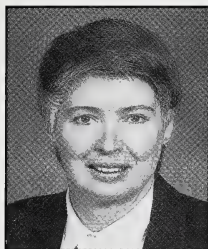
## ***Boards, Councils and Associations:***

Fellow, Institute of Mathematics and its  
Applications. Fellow, British Computer  
Society. Associate, British Psychological  
Society. President, North American  
Personal Construct Network.

## ***Contribution to Science:***

Mildred L.G. Shaw has developed a range  
of interactive computer programs based  
on personal construct psychology which  
are in widespread use internationally. They  
are used for expert systems, in management,  
clinical and educational studies. She has  
been selected to the Editorial Boards of nume-  
rous publications such as the "International  
Journal of Industrial Expert Systems, Artifi-  
cial Intelligence and Neural Networks" and  
the "International Journal of Man-Machine  
Studies." She is author of 5 books on aspects  
of computing and psychology, and has  
published a wide range of papers on human  
factors in computing, over 160 in refereed  
journals, books and conference proceedings.  
She has consulted widely for industry and  
government agencies on computer-based  
problem-solving techniques, including the  
development of networked participant systems.

# *SIMONS, Margaret Y.C. (Peggy)*



Calgary,  
Alberta

## ***Current Employment:***

Director, Strategic Planning, Resources Division, Petro-Canada Resources, 1992 to present.

## ***Career:***

General Manager, Whitecourt Value Centre, 1991-92; Director, Asset Optimization, 1990-91; Director, Products Division, Strategic Planning, 1988-90; Manager, Western Region Product Supply, 1987-88; Senior Advisor, Western Region, 1986-87; Manager, Supply Planning and Performance, Western Region, 1986, Petro-Canada Resources. Head Office Refining, Special Projects, 1985-86; Marketplace Focus Task Force, 1985; Superintendent of Operations, Clarkson Refinery, 1981-85; Process Supervisor, Clarkson Refinery, 1980-81; Process Specialist, Refining, 1979-80; Process Engineer, Clarkson Refinery, 1976-79; Process Engineer, Pilot Plant, Sheridan Park, 1968-76, Gulf Canada Products Division.

## ***Education and Professional***

### ***Designations:***

P.Eng., Association of Professional Engineers of Ontario (APEO). M.B.A., University of Toronto, 1968.

### ***Contribution to Science:***

Peggy Simons is recognized for her contribution to the strategic planning process. With expertise in exploration and production, as well as refining and marketing, she has applied her strategic planning knowledge to the resource business in assisting with a turnaround strategy within her company. In recognition of her University Alumni involvement and professional accomplishments she was awarded the 215 Medal for Meritorious Service in and for the Profession by the Engineering Alumni Association.



# *SIMPSON, Dr. Kathleen (Kay) A.*



Edmonton,  
Alberta

## ***Current Employment:***

Principal, Quality Laboratory Solutions Ltd.,  
1993 to present.

## ***Career:***

General Manager, Norwest Labs, 1993.  
Laboratory Director, Public Works, City  
of Edmonton, 1987-92. Laboratory Super-  
visor, University of Alberta, 1983-84.  
Instructor, Chemical Technology Program,  
Northern Alberta Institute of Technology  
(NAIT), 1977-87. Teaching Assistant, Univer-  
sity of Alberta, 1976-77. Teacher, Bishop  
Strachan School for Girls, Ontario, 1974-75.  
Research Associate, University of Toronto,  
1973-74. Part-time Teaching Assistant,  
University of Alberta, 1969-71. Teacher  
of Chemistry, CUSO, Tanzania, 1966-68.

## ***Education and Professional***

### ***Designations:***

Program for Executive Development, Univer-  
sity of British Columbia, 1991. Supervisory  
Development Program, University of Alberta,  
1988. Graduate Diploma in Adult Education,  
University of Alberta, 1982. Professional  
Diploma in Education, University of Alberta,  
1976. Ph.D., Chemistry, University of Alberta,  
1973. B.Sc. (Honours), Chemistry, University  
of Alberta, 1966.

## ***Boards, Councils and Associations:***

Chair, Local Section, Chemical Institute  
of Canada. Chair, Chemical Technology  
Advisory Committee, NAIT, 1989-95. Past  
Chair, Alberta Water Analysts Committee.

## ***Contribution to Science:***

Kay A. Simpson is a scientific manager and  
technical educator whose career covers many  
facets. Dr. Simpson provides consultative  
services to industry on all aspects of labor-  
atory activity. As instructor of technology  
students she has promoted the safe and  
efficient operation of laboratories. She has  
regularly presented technical talks and pa-  
pers in both international and local forums  
on safety, quality assurance and water  
quality. A volunteer with the Canadian Uni-  
versity Students Overseas she was a teacher  
of chemistry in Tanzania.

# *SLOAN, Monica E.*



Edmonton,  
Alberta

## ***Current Employment:***

Assistant Vice President, Strategy Development, Telus Corporation, 1991 to present.

## ***Career:***

Product Applications Manager, Novacorp International Consulting Incorporated, Calgary, 1990-91. Process Development Manager, Canadian Technology Centre, 1988-90; Planning and Strategy Manager, 1987-88, Digital Equipment of Canada Ltd. Business Analyst, summer, 1986. Technical Supervisor, Northern Area Operations, Nova, An Alberta Corporation, 1983-85. Supervisor, Energy Conservation Section, Operations Engineering, Nova, An Alberta Corporation, 1980-83. Research Consultant, Management Science and Economics Group, Bureau of Management Consulting, Supply and Services, Government of Canada, 1978-90.

## ***Education and Professional***

### ***Designations:***

M.B.A., Harvard Graduate School of Business Administration, U.S.A., 1987. M.Sc., Engineering, Stanford University, U.S.A., 1978. B.Sc., Stanford University, 1977.

## ***Boards, Councils and Associations:***

Executive Board Member, Planning Forum, Edmonton. Board of Directors, Alberta Science Centre, 1990-92. Executive Committee, Energy Engineers Association, 1982-83. Board of Directors, Calgary YWCA, 1981-82.

## ***Contribution to Science:***

Monica E. Sloan, throughout her career, has managed a number of technology, new business and corporate development opportunities. She co-managed a computer manufacturing research facility and has been involved in the commercialization of new hardware and software technologies. Currently Monica is responsible for developing technology and corporate strategy for a telecommunications concern. Monica also has operating experience in infrastructure planning and management, marketing and finance. She has provided functional direction and guidelines to executive and senior managers on processes related to strategy planning and control. A volunteer in the larger community, she is a Member of the Board of the Planning Forum, Edmonton, and has served as a Director for the YWCA, the Alberta Science Centre and in an executive capacity for the Energy Engineers Association.

# SOKOL, Dr. Pamela A.



Calgary,  
Alberta

## ***Current Employment:***

Assistant Dean, Graduate Studies, Department of Medical Science, University of Calgary, 1992 to present. Associate Professor, Department of Microbiology and Infectious Diseases, University of Calgary, 1989 to present. Alberta Heritage Foundation for Medical Research Scholar, 1984 to present.

## ***Career:***

Assistant Professor, Department of Microbiology and Infectious Diseases, University of Calgary, 1984-89.

## ***Education and Professional***

### ***Designations:***

Postdoctoral Fellow, Department of Microbiology and Infectious Diseases, University of Calgary Health Sciences Centre, 1982-84. Postdoctoral Fellow, Department of Microbiology and Immunology, Virginia Commonwealth University/Medical College of Virginia, U.S.A., 1981-82. Ph.D., Microbiology, Oregon Health Sciences University, U.S.A., 1981. B.S., Biology, University of Connecticut, U.S.A., 1977.

## ***Boards, Councils and Associations:***

Network Science and Budget Committee, Calgary Administrative Unit Coordinator of Canadian Bacterial Diseases Network of Centres of Excellence, 1990 to present.

## ***Contribution to Science:***

Pamela A. Sokol is a bacteriologist who studies iron acquisition systems in bacteria which cause common infections. She has identified proteins and genes in the iron acquisition process that lead to new therapies, including vaccines, for hospitalized patients with compromised immune systems. She has been invited to speak nationally and internationally on topics such as infectious diseases, cystic fibrosis and molecular biology. Dr. Sokol has completed many publications and presentations and participates in numerous professional groups including grant panels, advisory boards, scholarship committees and journal reviews. As Professor and lecturer she has principal supervisory responsibility for several Graduate students and Postdoctoral Fellows who are research trainees. She is a Heritage Medical Scholar.

# SPENCER, Dr. Mary E.



Edmonton,  
Alberta

## ***Current Employment:***

University Professor Emeritus, Department of Plant Science, University of Alberta, 1990 to present.

## ***Career:***

University Professor, 1984-90; Professor, 1964-83; Associate Professor, 1963-64, Department of Plant Science, University of Alberta. Assistant, Associate Professor, Acting Head, Department of Biochemistry, University of Alberta, 1953-62. Lecturer, University of California, Berkeley, 1951-53. Chemist, National Canners Association, U.S.A., 1948-49. Chemist, Ayerst, McKenna & Harrison, Montreal, 1945-47.

## ***Education and Professional***

### ***Designations***

Ph.D., Agricultural Chemistry, University of California, Berkeley, 1951. M.Sc., Chemistry, Bryn Mawr College, 1946. B.A. (High Honours), Chemistry, University of Saskatchewan, 1945.

## ***Boards, Councils and***

### ***Associations:***

Member, Premier's Council on Science and Technology, Alberta, 1990 to present. Member, Royal Society of Canada Advisory Committee on the Evaluation of Research, 1989 to present. Member, Minister's Advisory Committee,

Networks of Centres of Excellence, 1988-92. Council Member, Natural Sciences and Engineering Research Council of Canada (NSERC), 1986-92. Member, National Research Council of Canada (NRC) Associate Committee on Scientific Criteria for Environmental Quality – Panel on Ethylene in the Environment, 1983-85. Member, Consultative Committee on IBT Pesticides, 1981-82. Member, Board of Governors, University of Alberta, 1976-79. Council Member, NRC, 1970-76. Chair, National Advisory Committee on Biology, NRC. Chair, Advisory Board for Biological Division of NRC, Ottawa. Group Chair, Biology Grant Selection Committees, NRC. Chair, NRC Visiting Committee on Forestry Research, 1975-76. Member, Task Force on Post-Secondary Education, Alberta Government Commission on Educational Planning, 1970-72.

## ***Contribution to Science:***

Mary E. Spencer's research is on plant respiration, and on the plant hormone, ethylene. She was awarded the Gold Medal of the Canadian Society of Plant Physiologists in 1990 for her research, and is a Fellow of the Royal Society of Canada and of the Chemical Institute of Canada. She has more than 100 research publications in refereed journals, and served on the Editorial Board of Plant Physiology.

# *SPETCH, Dr. Marcia L.*



Edmonton,  
Alberta

## ***Current Employment:***

Associate Professor, Department of Psychology, University of Alberta, 1987 to present.

## ***Career:***

Assistant Professor, Dalhousie University, Nova Scotia, 1983-87. Postdoctoral Fellow, University of California, San Diego, U.S.A., 1981-83.

## ***Education and Professional***

### ***Designations:***

Ph.D., University of British Columbia, 1981.  
M.A., University of British Columbia, 1979.  
B.A., University of British Columbia, 1977.

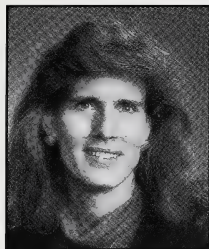
## ***Contribution to Science:***

Marcia L. Spetch is recognized for her work in animal learning and cognition. She is concerned with spatial and temporal information processing in pigeons, with numerous publications to her credit on topics such as animal learning and behavior. She has presented conference papers throughout North America. The Killam Postdoctoral Fellowship is only one of the many awards she has received.

Dr. Spetch teaches Honours seminars, principles of learning (junior level), and application of learning (senior level). Among other professional positions, she has been the Associate Editor of the "Psychonomic Journal" and "Animal Learning and Behavior."



# STURGESS, Kim



Calgary,  
Alberta

## ***Current Employment:***

Director, Chair of Management Committee and Chief Operating Officer, Revolve Technologies Inc., 1992 to present.

## ***Career:***

President and Owner, KSI Management Limited, 1989-92. Vice President, Greyhound Lines of Canada Ltd., 1988-89. Management Consultant, McKinsey and Co., 1984-88. Reservoir Engineer, Esso Resources Canada Ltd., 1978-82. Gas Pipeline Engineer, National Energy Board, Ontario, 1977-78.

## ***Education and Professional***

### ***Designations:***

P.Eng. M.B.A. (With Distinction), University of Western Ontario, 1984. B.Sc. (Honours), Engineering Physics, Queen's University, 1977.

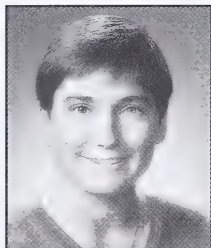
### ***Boards, Councils and Associations:***

Director, Canadian Engineering Memorial Foundation, 1991 to present. Board Member, Alberta Science Center Society, 1989 to present. Member, Board of Trustees, Queen's University, 1987 to present. President, Calgary Queen's Alumni Association, 1980-82. Vice President and Treasurer, Queen's Engineering Society, 1975-77.

## ***Contribution to Science:***

Kim Sturges is the owner/manager of a dynamic technology based company. Her consulting work focuses on technology transfer and development and she has successfully managed projects such as the spin out of an operating department of a large corporation into an employee owned technology based company of 25 employees. She has negotiated strategic partnerships, and the external financing for commercial ventures. An active member of many professional associations, she is a Director for organizations such as the Alberta Science Center Society and Queen's University. As a dedicated community volunteer she has, among other activities, served as a Junior Achievement Project Business volunteer, a participant in the Alberta Future of Work Initiative and a Member of the Premier's Advisory Group on Privatization.

# SUTHERLAND, Lynn



Calgary,  
Alberta

## ***Current Employment:***

Business Unit Leader, Pattern Analysis and Machine Intelligence, Department of Advanced Computing and Engineering, Alberta Research Council, 1993 to present.

## ***Career:***

Associate Research Officer, Department of Advanced Computing and Engineering, 1992-93; Assistant Research Officer, 1986-92; Junior Research Officer, 1985-86, Alberta Research Council. Research Associate, Department of Computer Science, Queen's University, 1985. Senior Programmer, N.I.A.L. Systems Limited, Ontario, 1984-85. Visiting Scientist, Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology, U.S.A., 1984. Research Assistant, Department of Computer Science, Queen's University, Ontario, 1981-83.

## ***Education and Professional***

### ***Designations:***

M.Sc., Computer Science, University of Saskatchewan, in progress. B.Sc., Computer Science and Mathematics, Queen's University, 1982.

## ***Contribution to Science:***

Lynn Sutherland, computer scientist, has served as an Artificial Intelligence Project Leader developing software for the monitoring and control system of an offshore semi-submersible drilling platform. Her varied career has also taken her to the sports arena: she designed and developed advanced computer software for predicting outcomes in hockey and football competitions. Pattern analysis and machine intelligence are part of her responsibilities and she is also interested in programming language design, massive data interpretation and machine learning. She has an extensive background in computer research including the machine learning of patterns in patent information. This analysis could eventually lead to automated search and retrieval of patent information. She dedicates time to Science Hotline, Minerva, Aunts at Large and other similar programs. She contributes regularly to the Canadian Artificial Intelligence Magazine.

# TAIT, Katherine M.



Calgary,  
Alberta

## ***Current Employment:***

Study Manager, Monenco AGRA.

## ***Career:***

Project Manager, Senior Mechanical Engineer, Research Engineer, Monenco AGRA, 1975 to present. Lecturer, Niagara College of Applied Arts and Technology, Ontario, 1974-75.

Mechanical Engineer, Fleet Manufacturing Ltd., Ontario, 1969-70. Instructor, Niagara College of Applied Arts and Technology, 1969. Technical Staff, Engineering Sciences Data Unit, U.K., 1966-68.

## ***Education and Professional***

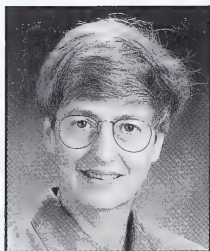
### ***Designations:***

P.Eng. M.Sc. (Engineering), Imperial College, U.K., 1965. Apprentice, Student and Graduate, De Havilland Aircraft Company, U.K., 1960-65. B.Sc. (Aeronautical Engineering), Imperial College, 1964.

## ***Contribution to Science:***

Katherine M. Tait is Manager of the Mechanical Department in her company and she has wide experience in the design and project management of thermal power plants and oil sands as well as knowledge in advanced technologies for power generation such as the gasification of coal. Recent work has included a feasibility study on utilization of low grade and waste coal in a cogenerative facility. Co-author of several technical papers in her field of expertise, she is the recipient of the Joseph Award for Ladies in Engineering – United Kingdom.

# TAYLOR, Dr. Diane E.



Edmonton,  
Alberta

## ***Current Employment:***

Professor, Department of Medical Microbiology and Infectious Diseases, University of Alberta, 1986 to present. Alberta Heritage Foundation for Medical Research (AHFMR) Scientist, 1991 to present. Consultant, Enteric Section (Campylobacter), Northern Alberta Provincial Laboratory of Public Health, 1988 to present. Adjunct Professor, Department of Microbiology, University of Alberta, 1982 to present.

## ***Career:***

Medical Research Council (MRC) Visiting Scientist, Institut Pasteur, France, 1987-88. Associate Professor, Department of Medical Microbiology, University of Alberta, 1981-86. Assistant Professor, Department of Medical Microbiology, University of Toronto, Ontario, 1979-81. Senior Research Associate, Research Institute and Department of Bacteriology, Hospital for Sick Children, Ontario, 1977-81. MRC Postdoctoral Fellow, Research Institute, Hospital for Sick Children, 1975-77. Technologist, Toronto Hospital, 1967-70. Mycology Research Technician, Queen's University of Belfast, Northern Ireland, 1965-67. Pathology Laboratory Technician, Hope Hospital, U.K., 1961-64.

## ***Education and Professional Designations:***

Ph.D., Microbiology, University of Toronto, 1975. B.Sc., Microbiology, University of Toronto, 1972.

## ***Contribution to Science:***

Diane E. Taylor, microbiologist, is a senior researcher of the Alberta Heritage Foundation for Medical Research. She is widely known for her advancement of knowledge regarding bacteria which cause food poisoning and severe infections in the blood and organs of humans and animals. These bacteria are increasingly resistant to antibiotics and Dr. Taylor's study of their genetics becomes ever more important for understanding such resistance. In her gene studies on the bacterium 'Helicobacter pylori' she has developed new genetic probes for diagnosing infection. She is an international speaker and author of many publications and is a member of the distinguished Centre of Excellence for Bacterial Diseases. She has served on many committees and also has found time to help organize symposia such as the one for 'Bacterial Plasmids' (Canadian Society of Microbiologists) and the scientific program for the Alberta Heritage Days Meeting.



# THOMAS, Sharon



Calgary,  
Alberta

## ***Current Employment:***

Science Specialist, Calgary Board of Education.

## ***Career:***

Science Department Head, Calgary Board of Education (CBE), 1980-89. Science Specialist, CBE, 1978-80. Science Consultant, CBE, 1976-78. Chemistry Teacher, CBE, 1974-76. Science Teacher, CBE, 1973-74. Research Technician, University of Exeter, U.K., 1970-71.

## ***Education and Professional***

### ***Designations:***

Ph.D. Candidate, University of Calgary, 1989-94. After Degree Education Program, University of Calgary, 1972-73. M.Sc., Chemistry, University of Saskatchewan, 1972. Honours Certificate in Chemistry, University of Saskatchewan, 1969. B.A., Chemistry (Distinction), University of Saskatchewan, 1968.

## ***Boards, Councils and***

### ***Associations:***

Chair, Subcommittee on Encouraging the Science and Technology Culture in Alberta, Premier's Council on Science and Technology. Past President, University of Calgary Alberta Women in Science and Engineering (AWES). Past President, Alberta Teachers' Association (ATA) Science Council.

## ***Contribution to Science:***

Sharon Thomas is dedicated to the encouragement of young women towards science and engineering careers. An outstanding teacher, she has brought her knowledge and enthusiasm to the classroom, sharing her expertise in learning strategies with her colleagues as well as students and parents. She has served on numerous local and provincial curriculum and evaluation committees. Sharon initiated the Calgary Board of Education Science Careers Conference as well as the all female senior high physics classes. She has carried her philosophy to the adult community as a member of the First Year Chemistry Steering Committee at the University of Calgary.

# THORNE, Wendy E. Roberts



Calgary,  
Alberta

## ***Current Employment:***

Senior Environmental Engineer, Golder Associates Ltd., 1993 to present.

## ***Career:***

Environmental Engineering Consultant, H.F. Thimm & Associates Ltd., 1990-93. Teaching Assistant, University of Calgary, 1988-89. Reservoir Engineer, Energy Resources Conservation Board (ERCB), 1986-87. Environmental Engineer, ERCB, 1981-86.

## ***Education and Professional***

### ***Designations:***

P.Eng. Environmental Science, University of Calgary, 1990. BioResource Engineering, University of British Columbia, 1981.

## ***Boards, Councils and***

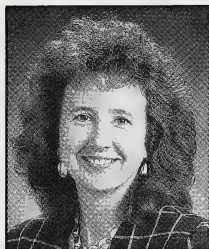
### ***Associations:***

President, The Calgary Association for Cesarean Support.

## ***Contribution to Science:***

Wendy E. Thorne is a specialist in environmental management and provides consulting services in environmental science and engineering. She has assessed and developed remediation and management strategies for contaminated sites and assisted public interest groups in dealing with environmental issues. She has taught courses including, "Water Management in the Oil and Gas Industry" and "Management of Contaminated Sites." Among other awards she has received are the Environmental Design Gold Medal and a Canadian Land Reclamation Association Best Thesis Award. She is a member of several professional groups and a community volunteer.

# TKACZYK, *Alice S.*



Edmonton,  
Alberta

## ***Current Employment:***

Consultant, Water Resources Technologist,  
1989 to present.

## ***Career:***

Water Resources Technologist, Alberta  
Environmental Protection, Government  
of Alberta, 1989-93. Technologist, DALTAM  
Consulting Ltd., 1989. Water Rights Tech-  
nologist, Alberta Environment, Government  
of Alberta, 1982-87. Water Resources  
Engineering Technologist, UMA Engineering  
Ltd., 1980-82. River Engineering Technolo-  
gist, Alberta Environment, Government  
of Alberta, 1976-80.

## ***Education and Professional***

### ***Designations:***

Registered Engineering Technologist (R.E.T.),  
Alberta Society of Engineering Technologists  
(ASET), 1987. Diploma, Biological Sciences  
Technology, Northern Alberta Institute  
of Technology (NAIT), 1976.

## ***Boards, Councils and Associations:***

President, ASET, 1992 to present. Member,  
Awards Committee/Discipline Committee,  
ASET, 1990 to present. First Vice-President,  
ASET, 1990-92. Acting Chair, Edmonton  
Chapter, ASET, 1987. Provincial Councillor,  
ASET, 1986-88. Member, Editorial Advisory  
Committee, ASET, 1984-92.

## ***Contribution to Science:***

Alice S. Tkaczyk is a Registered Engineering  
Technologist who has worked as a Water  
Resources Technologist for the past 15 years.  
She has shared her knowledge and experien-  
ce while serving in several capacities with  
the Alberta Society of Engineering Techno-  
logists, including President of the Society,  
commencing in 1992. She was re-elected  
for a second term as President in 1993.  
Ms. Tkaczyk is a strong advocate of women  
in science and technology and she is support-  
ive of initiatives of ASET in encouraging  
young women to pursue careers in these  
non-traditional roles. Ms. Tkaczyk is ASET's  
representative for the Edmonton Science  
Technology Network, and has judged entries  
at local science fairs.

# TOVELL, Dr. Dorothy R.



Edmonton,  
Alberta

## ***Current Employment:***

Research Associate, Department of Medical Microbiology and Infectious Diseases, University of Alberta, 1992 to present. Coordinator, Women in Scholarship, Engineering, Science and Technology (WISEST), University of Alberta, 1991 to present. Sessional Lecturer, Women's Studies, University of Alberta, 1991 to present.

## ***Career:***

Sessional Lecturer, Department of Biochemistry, University of Alberta, 1989-91. Research Associate, Department of Medical Microbiology and Infectious Diseases, University of Alberta, 1979-90. Instructor, Spring Session for Seniors, Faculty of Extension, University of Alberta, 1988 and 1989. Instructor, Faculty of Extension, University of Alberta, 1987. Senior Demonstrator, Undergraduate Biology Laboratories, Introductory Biology Program, University of Alberta, 1978-80. Research Associate, Department of Microbiology and Immunology, Queen's University, 1972-77.

## ***Education and Professional Designations:***

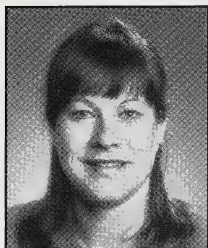
Ph.D. (Biochemistry), University of Alberta, 1969. B.Sc. (First Class Honours in Biochemistry), University of Alberta, 1965.

## ***Contribution to Science:***

Dorothy R. Tovell, biochemist, has researched and published works on structure and replication of viruses, antiviral and diagnostic drugs, interferon and virus induced auto-immunity. A co-authored publication, "So What Did You Do With Your Science Degree?", is currently in press. She is a sessional lecturer in Women's Studies and has written a report and recommendations on "Public Education Programs in Science", Faculty of Extension, University of Alberta. Dr. Tovell is the Coordinator of WISEST, directing programs which encourage young women to consider careers in science, engineering and technology.

She also devotes time and expertise to the Edmonton Science and Technology Network, and the Committee on Aboriginal People and Science in the Year 2000.

# VAN DER VEEN, Sandra A.



Calgary,  
Alberta

## ***Current Employment:***

Senior Reservoir Engineer, Talisman Energy, 1993 to present.

## ***Career:***

Resource Development Team Leader, 1992-93; Engineering Supervisor, Reserves, 1989-92; Senior Engineer, Reserves, 1988-89, Encor Inc. Area Supervisor, Exploitation Department, 1987-88; Senior Exploitation Engineer, 1986-87; Exploitation Engineer, 1984-86; Project Engineer, Oil and Gas Engineering, 1982-84, Dome Petroleum Limited. Engineer, Project Development, Hudson's Bay Oil and Gas Co. Ltd./Dome Petroleum Limited, 1980-82.

## ***Education and Professional***

### ***Designations:***

P.Eng. Management Development Certificate (PEGG), University of Calgary Continuing Education, 1985. B.Sc. (Engineering), University of Alberta, 1980.

### ***Contribution to Science:***

Sandra A. Van der Veen has expertise in several disciplines including reservoir, exploitation, evaluations and facilities engineering. She is currently filling a senior technical role at Talisman. Previous responsibilities include, leader of a 12 member cross-functional team responsible for the resource management of 2 major oil producing areas. In addition, she was assigned to several task forces conducting studies in the areas of organizational design, property dispositions and property rationalization while employed by Encor.



# VELJKOVIC, Maja



Edmonton,  
Alberta

## ***Current Employment:***

Section Head, Upgrading Research, Syncrude Canada Ltd.

## ***Career:***

Section Head – Extraction Research, Senior Engineer – Extraction Research, Syncrude Canada Ltd., 1979 to present. Process Engineering, SNC Consulting Services Ltd., 1976-79.

## ***Education and Professional***

### ***Designations:***

P.Eng. Management Development Program, 1988. MA.Sc., Chemical Engineering, University of British Columbia, 1975. BA.Sc., Chemical Engineering, University of Belgrade, Yugoslavia, 1972.

## ***Boards, Councils and***

### ***Associations:***

Secretary, Canadian Society of Chemical Engineers.

## ***Contribution to Science:***

Maja Veljkovic is a chemical engineer whose career has included process engineering and extraction research. She led a team which developed multi-stage mixing/setting technology for future commercial application, and has also developed and implemented a more empowering Performance Evaluation Program for her company. Active in her professional community, she has served in several executive capacities for the Canadian Society of Chemical Engineers. She is a former Advisory Board Member of the City of Edmonton Parks, Recreation and Culture Department.

# WENMAN, Dr. Wanda M.



Edmonton,  
Alberta

## ***Current Employment:***

Professor, Department of Pediatrics and Department of Medical Microbiology and Infectious Diseases, University of Alberta, 1988 to present. Director, Division of Pediatric Infectious Diseases, University of Alberta Hospitals, 1984 to present. Head, Special Pathogens Division, Provincial Laboratory of Northern Alberta, 1992 to present. Adjunct Professor, Department of Microbiology, University of Alberta, 1983 to present. Alberta Heritage Foundation for Medical Research (AHFMR) Scholar, 1981 to present.

## ***Career:***

Associate Professor, Department of Medical Microbiology and Infectious Diseases, 1987-88; Associate Professor, Department of Pediatrics, University of Alberta, 1981-88. Medical Research Council (MRC) Fellowship, Molecular Biology Institute, University of California, Los Angeles, U.S.A., 1980-81. MRC Fellowship, 1979-80; Fellowship in Pediatric Infectious Diseases, University of Manitoba, 1977-79. Registrar, Department of Infectious Diseases and Regional Virology Laboratory, University of Glasgow, 1976-77.

## ***Education and Professional Designations:***

Fellow, Pediatric Infectious Diseases Society and Infectious Diseases Society of America. F.R.C.P.(C) (Pediatrics), 1979. M.D., University of Calgary, 1974.

## ***Contribution to Science:***

Wanda M. Wenman is a Heritage Medical Scholar who is internationally known for her research into molecular mechanisms of human infections, especially the structure function relationship of parasitic surface components – into chlamydia and giardia and into potential diagnostic and vaccine reagents. Author of many abstracts and presentations, she is a speaker on the international scene and was a guest professor in 1992 at the Chernobyl Children's Project in Kiev, Ukraine (responsible for teaching and consulting in infectious diseases).

# WIERZBA, Dr. Ida



Calgary,  
Alberta

## ***Current Employment:***

Professor, Department of Mechanical Engineering, University of Calgary, 1987 to present.

## ***Career:***

Associate Professor, Department of Mechanical Engineering, University of Calgary, 1982-87. Sessional Instructor, Department of Chemical and Petroleum Engineering, University of Calgary, 1981-82. Research Associate, Department of Mechanical Engineering, University of Calgary, 1980-82. Research Associate, Department of Chemical and Petroleum Engineering, University of Calgary, 1978-79. Senior Scientist, Aeronautical Research Institute, Warsaw, Poland, 1960-79.

## ***Education and Professional***

### ***Designations:***

P.Eng. Ph.D. (Combustion), Warsaw Technical University, Warsaw, Poland, 1976.  
M.Sc. (Aviation Engines), Moscow Aeronautical University, Moscow, Russia, 1960.

## ***Boards, Councils and Associations:***

Examiner, Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA).

## ***Contribution to Science:***

Ida Wierzba is actively involved in combustion, fuels and energy research, the results of which have been published internationally in more than 60 technical papers. She has been recognized by the American Society of Mechanical Engineers for sustained contribution to technical literature. While teaching students and monitoring their research, she has found time to sit on numerous committees and to help in organizing conferences, refereeing technical papers and evaluating research grant applications. A former senior scientist at the Aeronautical Institute in Warsaw, Poland, she was commended for research excellence by that Institute's administration for her studies on gas turbine engines and other energy producing devices.

# **WISMATH, Dr. Shelly L.** Lethbridge, Alberta

## ***Current Employment:***

Associate Professor, Department of Mathematical Sciences, University of Lethbridge, 1992 to present.

## ***Career:***

Assistant Professor, Department of Mathematical Sciences, University of Lethbridge, 1988-92. Lecturer, Department of Mathematical Sciences, University of Lethbridge, 1987-88 and 1983-86. Academic Assistant, Department of Mathematical Sciences, University of Lethbridge, 1980-81.

## ***Education and Professional***

### ***Designations:***

Ph.D., Mathematics, Simon Fraser University, B.C., 1988. M.Sc., Mathematics, Simon Fraser University, 1983. B.Sc. (Honours), Mathematics, Queen's University, Ontario, 1976.

## ***Contribution to Science:***

Shelly L. Wismath is a mathematician, with research interests in the areas of universal algebra and semigroup theory. Her research is supported by an operating grant from the Natural Sciences and Engineering Research Council of Canada (NSERC), and has been published in several research journals. She is also very interested in the teaching of mathematics, and in 1989 she received the University of Lethbridge's Distinguished Teaching Award.



# **ZYGOCKI, Rhonda I.**      Calgary, Alberta

## ***Current Employment:***

Manager, Strategic Business Processes,  
Chevron Canada Resources, 1993 to present.

## ***Career:***

Manager, Evaluation Services, 1991-93; Team  
Leader, Reservoir Engineering, 1988-91; Joint  
Venture Representative, 1986-87; Petroleum  
Engineer – Hibernia Project, 1984-85; Petro-  
leum Engineer, 1980-83, Chevron Canada  
Resources.

## ***Education and Professional***

### ***Designations:***

P.Eng. Bachelor of Engineering (Civil),  
Memorial University, Newfoundland, 1980.

### ***Contribution to Science:***

Rhonda I. Zygocki is an engineer with  
expertise in the areas of business planning,  
investment and portfolio analysis, reservoir  
management and horizontal miscible  
enhanced oil recovery. She has contributed  
to technical committees in her industry and

aided in the preliminary development  
plan for the Hibernia Offshore Project.  
As Chairman of the Family and Workplace  
Study Team she led a task force which  
investigated family and workplace conflicts,  
which resulted in implementation of new  
part-time employment, flex time and flex  
day policies. She is an outstanding role  
model for other women in the company  
and the industry.







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